

MILITARY Miniatures

★ ★ ★ ★ ★ IN REVIEW ★ ★ ★ ★ ★

Pershing us over the top!

**Tamiya provides its own version
of the WW2 classic**

**A Czech Panzerjägerschnitzel:
building a Czech Republic kit
of the Marder III Ausf M**

**Peleliu '44: enhancing the Italeri kit
with a new update set from Trakz**

**Achilles, Heel! Taming the
Academy Achilles
17-pounder
armed M10**

**Hey, Abbott! Taking a bite
of the new mini SPG
from Accurate Armour**

**The Model Citizen returns!
WWII German Greatcoats,
part two of two (at last)**



Honey, I shrunk the tank!
Academy's answer to the U.S. M3 Light Tank

**MMiR: taking
its proud place
on the back of
the world's
finest toilets**



**And even
more cool
new stuff!**



**Neubaufahrzeug nicely:
the Armo multi-media kit**

No. **30**



MILITARY Miniatures

★ ★ ★ ★ ★ IN REVIEW ★ ★ ★ ★ ★

C O N T E N T S

In Review

A Czech Panzerjägerschnitzel

Or building a Czech Republic kit of the Marder III Ausf M Panzerjäger.

A new turret and spot of paint is all you need

Building a Tamiya T-72M1 Medium Tank.

Per-schwing!

Tamiya provides its own interpretation of the WW2 classic.

Peleliu '44

Improving and enhancing the Italeri kit with a new update set from Trakz.

Stuart, little

Academy's answer to the U.S. M3 Light Tank.

Achilles, Heel!

Taming the new Academy Achilles 17-pounder armed M10.

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Neubaufahrzeug nicely

Building the Armo multi-media kit.

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Hey, Abbott!

Taking a bite of the new mini SPG from Accurate Armour.

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ON THE COVER:

Well, pigs can now fly and you can finally go ice skating down south, Tamiya has gone and done a Pershing. And it's not just any Pershing, Tamiya has put its own special spin on it. Our full review begins on page 33. Also on the cover is the great little Stuart/Honey from Academy.





From Your Editor

I had a few comments (well, it seemed like a few at first) about military themed entertainment, other than modeling. There are some pretty good books and movies floating around out there right now. I had a chance to catch the film *Hart's War* recently. I thought this was a first rate war film. Like many of you out there, I always go into any war film as a cynic. There's always a ton of stuff to nit-pick (there are entire web sites devoted to picking apart *Saving Private Ryan*) and this always gets worse if the story and plot start to suck. *Hart's War* started out pretty well, with a ton of vehicle shots and good close-ups of accurate uniforms. The story in the film begins on December 16, 1944 and the location is the Ardennes. A young American staff Lieutenant (who has never been in combat) decides to give a lift to a front line Captain and given the timing, he runs smack dab into Skorzeny's fake GIs. All hell breaks loose and he ends up getting captured. The rest of the film chronicles his travels to a POW camp in Germany and his experiences there.

If you are a fan of *Stalag 17* or *The Great Escape*, then this is the film for you. The camp itself has been meticulously reproduced on a very authentic location. I was quite taken by the selection of uniforms seen on all of the major characters, as well as the guys milling around in the background. Given that hundreds of prisoners from all the branches of services are thrown together in such a camp, this observance by the designer's of the film is spot on. There is a lot of basic stuff, officer and enlisted alike. I spotted a paratrooper's overseas cap, along with a variety of unit patches. Bruce Willis' character wears the patch of the 1st Infantry Division. Another one of the characters wears the rarely seen M1943 pile lined infantry over coat. This item was only issued in limited numbers and generally only in Italy. The character is an infantry sergeant, too.

As mentioned above, the vehicle stuff is pretty solid. There's not much vehicle action, but what does show-up is as accurate as the uniforms. The trains used in the film all have the correct markings for a WW2 German train. There are two significant scenes that feature aircraft and these are also very accurately reproduced (not that I would know). I assume that both these scenes were computer generated, because of the accuracy and the fact that they are very realistic from an action point of view. I can't imagine anyone would risk vintage aircraft in that fashion!

The story was also well executed and it will keep your attention away from truly examining all the visual aspects. I'm always a sucker for military stories that explore the core values of duty, honor and loyalty. This film does this very well and the plot takes quite a few twists and turns, before it ends with a shock.

When this film was first released, I read the reviews and actually decided to pass on the basis of at least one of these reviews. But contemporary reviewers really can't inform "people like us," can they? I mean, you will rarely, if ever read about the historical significance of a war film's location or see comments about its accuracy. So, I think I'll be less of a cynic in the future.

Pithy and witty sub-head

Another film that is now out on DVD is *Blackhawk Down*. If you are (the only one) not familiar with the story, the film depicts the ill-fated Ranger/Delta mission in Somalia in the early nineties. The film is absolutely outstanding, but one should really consider this a companion piece to Mark Bowden's excellent book. The film is almost completely based on the book, but you'll almost certainly want to know more. Mark Bowden is a newspaper journalist and I know what you're thinking, how could a newspaper guy write anything balanced on the military? Let me tell ya, this has got to be the most thoroughly researched and written book on the military that I have ever seen. The author interviewed hundreds and hundreds of people, pored over thousands of pages of documents. The Army, in a very introspective and objective state of mind after the incident, gave the author unprecedented access to internal documents and other material. Bowden is actually one of the few individuals who has seen the majority of the video tape shot of the battle from an observation aircraft. He didn't let the Army down either. The end result is a very balanced view and one that the Army has soberly acknowledged as such. The book is so complete, that Bowden is often mistaken as having a security clearance. He was once invited to speak at an Army conference, based on that assumption. His talk eventually took place in a separate room, so that classified materials in the main conference hall would not be compromised.

So much ground is covered in the book that it would be near impossible to cover it all in the film. Bowden's minute by minute detail couldn't possibly be reproduced in a film less than 12 hours long. The filmmakers did an admirable job compressing the story into a reasonable amount of time. Ridley Scott, of *Alien* and *Gladiator* fame, directed the film and he really strove to give the entire film a genuine look and feel. Real Blackhawks, Littlebirds and their pilots were obtained from the Army and I have heard that this was at a huge expense to the producers of the film. The location, Morocco, stands in well for Somalia and the movie never fails to just reek of realism. The action sequences are especially compelling.

Although it is not available as of this writing, the excellent HBO mini-series *Band of Brothers* should be released for purchase by the end of 2002. This epic 10-part series was first broadcast on HBO in the fall of 2001. The story follows members of E Company, 506th Regiment, 101st Airborne Division and is based on a book by Steve Ambrose. And remember this is not regular TV, this is HBO TV. No punches are pulled here, my friends. This is combat and military life presented in as realistic a manner as possible. The whole series was put together by Tom Hanks and Steven Spielberg and the end result is impressive on a number of levels. Not only is it faithful to the book (which is based almost exclusively on personal interviews), but the original material has been enhanced and expanded with additional material gathered from the original characters and a few new ones. The attention to detail is vast. A whole treasure trove of weapons and gear was gathered and created to flesh out the look of the film. Several armored vehicles were created for the film. These are based on modern vehicles, but they are shot in such a way as to make them very convincing. A gorgeous selection of uniforms is seen and much of this was recreated, right down to the last hook and button. Given the rare nature of the original paratrooper gear, this must have been an enormous task.

The special effects are also pretty spectacular. There has been a very clever effort on the part of the filmmakers to blend these into the other action sequences, rather than throw them in for the heck of it. The scenes depicting the Normandy drop are like nothing you've ever seen before.

I know that this is kind of "old news," but for those of you that do not have HBO, you may want to run right out and buy or rent this as soon as its released. You won't be disappointed.

And now on with the show...

Welcome to issue number 30. There's a bunch of cool stuff in here. The big news is the Pershing. Tamiya has gone and done, not one, but two of them (if you can believe that). One in 1/35th scale and the other in 1/16th scale. We figured we'd look at the more popular one first and we'll save that big guy for next time. We are also checking out two new kits from Academy. These guys, it seems, are taking the hobby by storm. We are scoping some cool resin kits and conversions, as well. Proceed!

—Pat Stansell

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The Mail Sack



Canteen-o-rama

I noticed in a previous issue that you featured photos of an open jerrycan. I am sending you the attached photos of a German WWII canteen that I own. I am having difficulty identifying this piece of equipment and I am hoping that your readers can help. The marking "ESB40" also appears on the canteen.

Perhaps in the future you could feature more information on equipment like this. Generally, vehicle details are well covered in print, but stuff like boots, uniforms, decorations, boxes, crates, kitchen stuff, etc. are not.

—Alexander Kozlov

Check 'em out!



✉

Piddilly-dee

You guys published a feature story of "Mini-Women" back in issue 24 featuring the figure "woman who piddles." Could I get some more information on where to purchase MK35 of France?

—Robert Blank

Sure. Locally, as in the USA, we'd suggest checking with The Red Lancers. Their ad can be found elsewhere in this issue. Beyond them, you can try checking directly with the manufacturer at MK35 Editions, Chemin des Espérettes, 30200 Saint-Laurent de Carnols, France. Fax: 011 33 466 827 095. They also have a website, which is www.mk35.com and e-mail at mk35.editions@wanadoo.fr. Their product line is pretty diverse, with many other figures, accessories and buildings. Also see their ad in this issue.

✉

Well, just this once...

MMiR is the best. I have a love fest every time it hits my mailbox. It's a quality magazine with good humor. I'm looking forward to the long awaited Tiger book.

I am working on an Italeri Panzerwerfer 42 auf Maultier and I have a question: Can you point me to anywhere to buy some update kits and/or building tips for this model? I have looked on the Internet, but have only found some tracks in an ad in MMiR.

I know you rarely if ever enter into correspondence with us peasants, but any crumbs you could brush my way would be appreciated. Keep up the good work.

—Tom Davis

Royal Model makes a fantastic update set for the Panzerwerfer. It is stock number 074. This set is ultra cool and it includes everything that one needs to soup up the model: front and rear wheels, tubes for the launchers, brass and tons of other bits. Get yourself a set of



Friulmodellismo tracks for the Panzer I and you'll be in business. Oh, the number of that product? Its ATL-20.

All this stuff is available from Chesapeake Model Designs. Look for their ad in MMiR. Is it done yet?

✉

No sale!

I've been enjoying your DML Panther review. However, I just have to get my two cents in somewhere. Second paragraph, sentence six: "Great detail, super accurate and relatively easy to build. It that doesn't do it for you, I don't know what will."

I'm sorry, but no sale. DML's gray plastic sucks! (could this stuff be any cheaper?) I have a closet full of unbuilt DML kits. Full of sinkhole distortions and warped parts are the norm! Some of them have upper hull's that look like a pretzel. Also, their punch-out pins are always in the wrong spot. I'm sure your "kit graciously provided by the manufacturer" was in pristine condition. The rest of us get to buy crap!

—Ken Alfter

Hmmm... Do you want to talk about it? Let's review. The kits we get from the manufacturers are custom made especially for us in order to mask a fiendish plot to force sub-standard products on the unsuspecting consumer. Is that about it? Sorry, but no sale! The kits we get are shrink-wrapped and "out of stock." It'd be pretty tough to pick a ringer out of thousands and thousands of plastic models. If one looks back at our many reviews of DML kits, plastic distortion is a consistent topic. Small variances tend to crop up in their kits, depending (we guess) on when they were made. These are wildly inconsistent, even locally. We've checked with other local modelers and in most instances, their kits were OK. However, in the dozens of kits that we have reviewed over the years, we have found none of these problems insurmountable. Sinkholes and knockout marks are a fact of modeling life (did you build a Tamiya Marder?). That's why they make putty and sanding sticks.

COMING SOON TO MMiR:

Little Big Man

Tamiya's large and in charge 1/16th scale Pershing.

Dueling Shermans

The newly rehabilitated and released Tamiya Shermans.

Comrade farmer and his big gun

The Russian 203mm howitzer and S-65 tractor.



If anyone receives a genuine stinker, by that we mean a genuinely defective kit, it should simply be returned to where it was purchased. Believe it or not, model companies, mail order houses and hobby shops are all interested in customer satisfaction—not sticking it to you by selling "crap."

✉

Hank's Shank?

Hey Guys! Just finished reading #29 and as usual—SUPERB. I particularly enjoyed the article on the Jaguar M551.

I've had the kit since it first came out, but to be quite honest—it intimidated me and I've let it sit on the shelf. Even a klutz like me (that super glues his fingers together with alarming frequency) can figure out very quickly this ain't gonna be an easy one. The detail is superb, but the things I/you noted very quickly were the hull fit and those nasty tracks.

During 1975-'76, I commanded G Troop, 3d Armored Cav Regiment at Fort Bliss. I had the joy of owning nine of those miserable machines. As any Shank crewman (we called them that as a derogatory bastardization of Sheridan tank) would tell you, track sag was very important. If the track sagged as low as you see on the kit box, it would throw a track in a heartbeat. The M551 (and M113 as well) featured a single pin, live-action track. That meant if you had a section of five blocks and laid it on the ground, it would curl up like a centipede. The TM said (to get proper sag), you were supposed to run a weighted string from the sprocket to the idler and measure down to the top of the center road wheel. Yeah, right! Like we were going to run around in combat with a ball of twine and rulers! If you were around Shanks long enough, you just learned to "eyeball" the correct sag while on flat terrain.

Attached is one of my nine beasts in March 1975. It has the correct sag—just barely touching the top of the center wheel. Also of interest—late cupola armor but a VERY early gun tube with bore evacuator (funny—I never noticed that 'til now). And... per previous letters to you guys, a snazzy Sears latex paint job!

One question: The Jaguar kit features two large horizontal grooves gouged into the hull, behind the roadwheels, just above the torsion bars. I could be wrong, but in 13 months of walking around my Shanks, 300 days outta the year, I honestly don't

remember those. Anybody know what they are and were they always there? Brave Rifles!

—Hank Johnson

Oh come on Hank! Everyone knows what those are! Right? Right? Alright, alright, we have no earthly idea what those are. Rechecking photos and plans in the Hunnicut book just deepened the mystery. Maybe it was a case of zigging, instead of zagging when interpreting the measurements by the master pattern maker. Anyone else out there have an explanation?

Thanks for the tip on the tracks. This is still possible to accomplish using the method described in the article. Instead of gluing the blocks to the center wheel, one would just glue the teeth.

Amazingly, we're thinking about building the Desert Storm version, too. We'll keep you posted. Hank also had this postscript:

PS. With regard to the driver's "window" on the splash board: I know the window is there. The Shank floatation screen is a monstrosity and when erected, it looks like the old Sherman Duplex Drive tent—the window is the only way the driver can see to "swim" the vehicle. But I never saw the plexiglass. Every Sheridan I ever saw (CONUS, USAREUR, VN) had the window covered over with some kind of fiberboard material. The reason was obvious—you almost never erected the floatation screen and the window was centered exactly where everybody would step on it when climbing on board (you never board a tank from the rear or sides—the driver can't see you). I often wondered who put the cover on the window. They were uniformly made and I never saw it done at the unit level. I figured it must have been some division or depot-level MWO.

✉

Grills ala Gum Ka

In this article Mr. Stansell noted that no compatible photo-etch set was available for this kit. In fact, Gum Ka, a Japanese company, produces two photo-etch sets specifically for this kit. One set is for the grills.

The sets can be purchased for approximately \$8.50 each through Hobbylink Japan.

—Mark Johnson
johnson53@lml.gov

Thanks for the tip, Mark. Due to our deadline, we had already completed our feature when those screens were released. However, as of THIS writing they are the only ones on the market that will fit the Dragon Models kit. We expect that both Eduard and Aber shouldn't be too far behind.

✉

If you would like in on any of the dialog in MMiR, drop us a brief letter written on a fifty dollar bill or better yet, inscribe it on the bottom of a fully functional DMD radio-controlled Tiger I with speed control and optional optical targeting unit and send it to: Mail Sack, Ampersand Publishing Co., Inc. 235 NE 6th Ave., Delray Beach FL 33483 or mmirpat@aol.com. Letters are sometimes edited for brevity, obscenity, national security, or just to make you sound smarter.

We sincerely regret that we rarely, if ever, are able to personally enter into correspondence with our readers.



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STP 16014 SS Panzer Commander Kharkov 1943
By: John Rosengrant
(kit contains 1 figure and 1 section of a Panzer III)
\$45.00



STP 16013 SS Tiger Crew Battle Of Kharkov 1943
By: John Rosengrant

\$80.00
Both figures outfitted in armored personnel winter combination with extra arms for single figure display! (Figures are true 1/16th not 120mm or 1/15th scale).



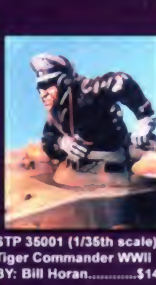
STP 16015 SS Panzer Crewman Karkov 1943
By: John Rosengrant
(kit contains 1 figure and 1 section of a Panzer III)
\$45.00



STP 16002 US Marine Infantry WWII
By: John Rosengrant... **\$45.00**



STP 16005 (1/16TH Scale)
101st Airborne @ Ravenoville 606th (Normandy Invasion)
By: Trevor Hensley... **\$45.00**



STP 16001 (1/35th scale)
Tiger Commander WWII
By: Bill Horan... **\$14.00**



STP 16007 (1/16TH scale)
SS Rottenfuhrer Ardennes
by Brian Stewart... **\$45.00**



STP 16011... \$45.00
U.S.M.C. Chosin Reservoir Korea 1950
By: John Rosengrant



STP 16010... \$120.00
"THE GHOSHIN FEW"
1st Marine Division Chosin Reservoir Korea 1950
By: John Rosengrant



STP 16012... \$45.00
U.S.M.C. Bar Gunner Korea 1950
By: John Rosengrant

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The Year in Preview



Aber

The amazing stuff never stops from our Polish friends. They are the first to release items for the FAMO trailer and those items are: **35102, Sd.Ah.116, Vol.1 Basic set** (Tamiya), Brass rod and copper wire, \$23.49 and **35103, Sd.Ah.116, Vol.2 Additional set** (Tamiya) (**10-c**), Brass rod and resin parts, \$23.49. Both sets contain a variety of mind-boggling parts. The additional set even includes resin parts. The accompanying photos show just how involved these two sets are. Another new item is **AC 35D05, Flowers**, \$12.99.

Future goodies look like this: **AC 35067, PzKpfw. I A/B Interior**, TBA; **AC 35076, Steyr 1500A** (TA), TBA; **AC 35077, Sdkfz 234/3 (IL)**, TBA; **AC 35086, 2.8 cm Spzbt41 AT Gm (DR)**, TBA; **AC 35089, Flak 38 20mm (IL)**, TBA; **AC 35090, Steyr 1500 Kommand** (TA), TBA and **AC 35A84, Sdkfz 250 Alt Upper Armor**, TBA.

The Aber line is found at all fine hobby shop and mail order outlets.

Academy

Academy continues its regular flow of new plastic armor releases. This includes a few 1/48th-scale items, but please note that Academy does not make a distinction in scale with their stock numbers.

New in 1/35th scale is **13003, M151A1 with**

105mm Recoilless Gun (1/35) (2). This is the basic M151A1 kit as released previously, with a very respectable recoilless rifle thrown in. The retail is also a respectable \$13.00.

The new 1/48th-scale items are **13005, Merkava Israeli MBT**, \$13.00; **13006, T-72 Russian MBT**, \$13.00; **13007, Challenger British**, \$13.00 and **13008, Leopard 2 A5 German MBT**, \$13.00. These kits are rather simple little replicas and are, perhaps, more toy-like than "scale-like," with their rubber band tracks and geared drive sprockets (the kits were originally motorized). However, we know there are collectors out there who may want them, regardless.

Look for Academy kits wherever plastic is sold.

Alan

Alan has released **AL015, German Sdkfz-138/1 Grille-M** and it retails for \$28.95. It's not terrible to look at and with a little added detail, it looks like it would shine (see the Tiger Models listing in the Short Takes section of issue 29). Alan kits are found everywhere.

AFV Decals

Small-scale modelers rejoice! A whole slew of teeny kits and decals are starting to come to our attention. This new company, AFV Decals, makes some of the best 1/72 & 1/76 scale water slide decals out there

and the value for money is really terrific. Here's what their extensive list looks like so far. **AFV 7201, Deutsches Afrika Korps**, contains enough decals to build 26 DAK vehicles, with numbers, crosses, divisional signs, etc., all for \$9.98. **AFV 7202, Armored Cars, Half-Tracks & Panthers**, contains enough decals to build 26 vehicles including seven Panthers, with numbers, crosses, divisional signs, etc. **AFV 7203 is Waffen-SS Armour**. This sheet gives enough decals to build 31 Waffen-SS vehicles, with numbers, crosses, divisional signs, etc. **AFV 7204, German Light & Medium Tanks, Pz. I, Pz. 38(t), Pz.III, Pz.IV**, has enough decals to build 36 vehicles with numbers, crosses, divisional signs, etc. **AFV 7206, Tiger & Pz. II**. This sheet gives enough decals to build 33 Tigers and 10 Pz.II's, with numbers, crosses, divisional signs, etc. Last up is **AFV 7205, Sturm, Jagd, & Kanonen**, a sheet that has enough decals to build 47 different German AFV's, with numbers, crosses, divisional signs, etc.

All of this diversity only comes with a \$9.98 price tag. This price is for each of the above listed sheets.

Look for the AFV Decals line through Squadron Signal Mail Order, or for more information see www.squadron.com

Archer Dry Transfers

These wild dudes have truly grown to be one of our

favorite companies. Why? Well, for starters—they listen. They listen to us and they listen to you. This means that a constant flow of new material is issuing forth and it all reflects what is most in demand. Oh, and did we forget to mention that the product that Archer produces is beautifully executed, accurate and a great value? Here's the latest 1/35th scale rundown. **AR35172, 13/18 Hussars Firefly VC (3)**, builds one vehicle (Carole) with extras for \$8.95; **AR35173, 13/18 Hussars Direct Vision M4A2 (4)**, builds 1 vehicle (Charmer) with extras, \$8.95 and **AR35174, 9th Lancers, 1st AD in North Africa (C Squadron) (5)**, builds two vehicles, \$10.50.

Don't forget that we now have brand new kits of the direct vision M4A1 (Armoured Brigade) and M4A2 (Chesapeake).

Most of what has been released in 1/35th scale is now finding its way into Archer's growing line of 1/72-

scale sheets. Here's the latest look at that stuff. **AR72067, 8th Army Arm of Service & Formation Signs 1940-42, 10th Corps, 9th Armored Brigade, 3rd Hussars, Warwickshire Yeomanry, and Royal Wiltshire Yeomanry, \$5.50**; **AR72068, Army Arm of Service & Formation Signs 1940-42, armored and infantry divisions of the Royal Artillery, Signals Detachment, and an Ordnance Company, \$7.95**; **AR72069, Army Arm of Service & Formation Signs 1940-42, armored and infantry divisions of the 1st Armored Div., 4th, 6th and 23rd Armored Bgd, 2nd New Zealand Div., 30th Corps, 7th and 9th Australian Div., \$5.50**; **AR72070, Army Arm of Service & Formation Signs 1940-42, 2nd and 7th Armored Division, 1st Army tank Brigade, 13th Corps, and 70th Infantry Division, \$5.50**; **AR72086Y, British Squadron Marks and Troop Numbers, Second Senior Regiment, \$3.95**; **AR72086W, British Squadron Marks and Troop Numbers, Independent Brigade, Regimental Headquarters, \$3.95**; **AR72086BL, British Squadron Marks and Troop Numbers, Junior regiment, \$3.95**; **AR72086G, British Squadron Marks and Troop Numbers, Fourth Regiment, Motor Battalion, \$3.95** and **AR72086R, British**



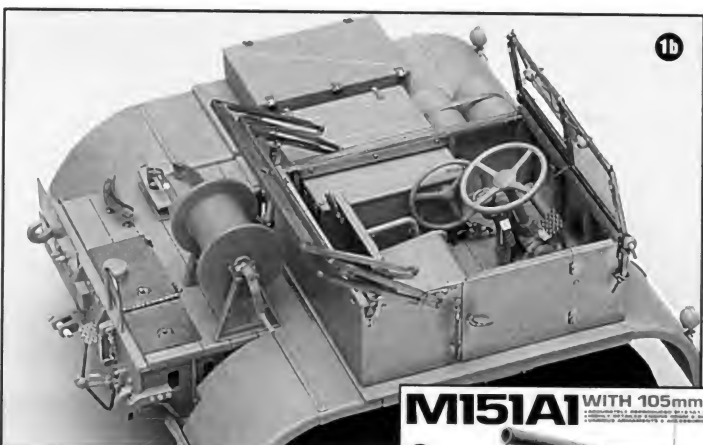
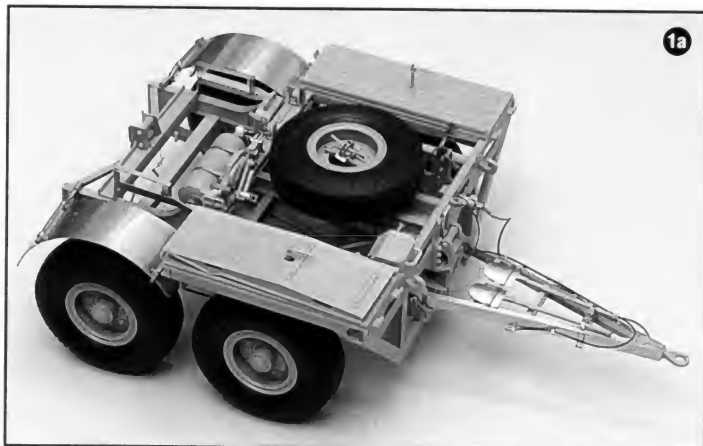
Squadron Marks and Troop Numbers, Senior Regiment, \$3.95.

Current and up-to-the-minute information on the entire line of products can always be found at www.archertransfers.com. Archer is also sold "over the counter" at hobby shops and mail order companies.

Armo

We don't get much in the way of new product warning from these guys. They tend to be the exclusive providence of the Internet. Although their product line is extensive, we have this single new item to show off. It is **35715, Flak 43 German AA Gun (6)**, \$14.00. This is an amazing little piece of miniature tooling, with a completely conical and perforated muzzle brake. The barrel is designed for the Italeri kit and just this simple addition would bump the kit up several steps!

Our sample was provided by Mission Models and they can be contacted at www.mission-models.com for more information on how to obtain this product in the U.S.



The Armory by Gauntlett

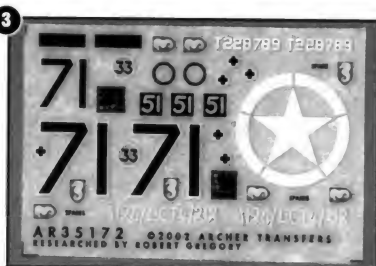
And you thought no one was listening out there... As a follow-up to their cool FAMO fender set, ABG has released **AG103, Sherman Update Set**. This is a highly useful little accessory set that contains a plethora of teeny parts to spice up your next Sherman kit. It's got stuff like the rear taillights with the proper stalks, a gorgeous .50 cal storage system, cable hardware, scale thickness bogie track skids and our favorite part, an open shell ejector port. The entire set is a fairly impressive feat of resin casting, too and all this accumulated resin love is a mere \$14.95. And, it will work on just about any Sherman kit or variant. Sounds like a deal to us!

ABG is distributed by M&Models in Chicagoland and they can be contacted at www.home.earthlink.net/~mmodels, or for more information see their ad elsewhere in this issue.

ABG is distributed by M&Models in Chicagoland and they can be contacted at www.home.earthlink.net/~mmodels, or for more information see their ad elsewhere in this issue.

Badger Air-Brush Co.

Badger Air-Brush Co. has announced a new air brush. It is called the 200-20





the line in the very near future.

Custom Dioramics

The cool thing about these guys is that they release about four new things every single month. The line is always oriented towards diorama accessories and unique figures. Here is the most recent rundown: CD 101, House Ruin (reissue), \$15.95; CD 103, Church Ruin (reissue), \$17.95; CD 114, Afghanistan Ruin (reissue), \$17.95; CD 2025, Crates & Boxes WWII, \$11.95; CD 2026, Fuel Containers WWII, \$11.95; CD 4032, European Baker WWII, \$12.95; CD 4033, University Professor, Europe WWII, \$12.95; CD 4036, Pharmacist, Europe WWII, \$12.95; CD 4037, German Reichspost Mailman, \$12.95; CD 6053, Mediterranean Setting Figure Base, \$12.95; CD 6054, Italian Villa Vignette Base, \$18.95 and CD 7012, 2 Story Range Finder Bunker Complex (Polyfoam), \$26.95.

The latest civilian figure releases round out what must be the largest line produced in the United States or anywhere else. 4033 and 4036 are basically dapper looking civilian dudes in three-piece suit. They are very diverse and could fit in any scene from the early part of the twentieth century right through the 1950's. Good show.

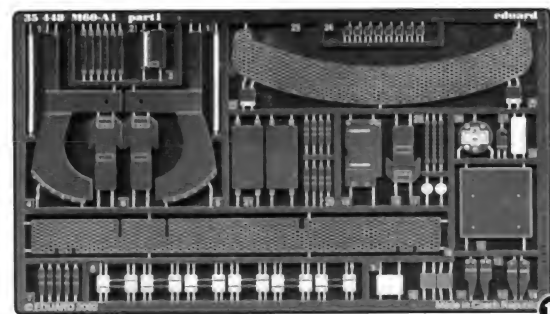
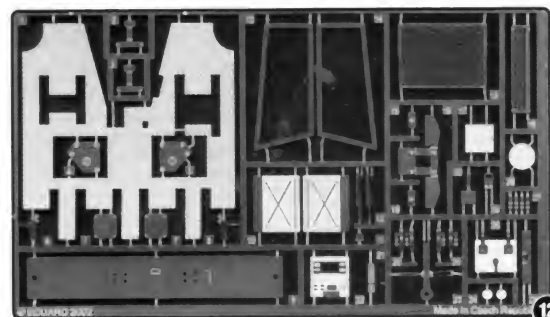
We have also recently received word on a very intriguing item, a European trolley car. This will eventually be released in two versions, CD 6051, European Trolley WWII (Slave Unit), \$149.95 and CD 6052, European Trolley WWII (Powered Unit), \$159.00. Both appear to be large and very elaborate resin kits and additional accessories are promised. The Custom Dioramics line is distributed through VLS.

Dragon

As expected, Dragon has whipped up its "D" version of the Panther. Like the previous release, this one is cleverly designed and comes packaged with another great Volstad illustration adorning the cover. The official designation is 6120, Sd.Kfz.171 Panther D Kursk (1943) (lead-in). No word on the retail yet, but it is probably safe to assume that it will be the same as the Panther A, \$31.98. OK, now how about a late A?

Dream Catcher

Dream Catcher is a small line of accessories that are



10 DREAM CATCHER ACCESSORIES
Reference DCP 028
WWI
American Propaganda Posters



single action detail airbrush. According to their very thorough press release, the brush is stated to be "from the paint tip to the paint flow adjusting system, this new airbrush is the ideal choice for elite hobbyists and professional modelers alike." Cool.

The brush is armed with a paint tip that is engineered with a concave design to reduce and control over spray, achieving tighter lines. The "tight line detail nozzle" provides the ultimate in detail for the precision professional model finisher (there are no medium or heavy nozzles—this is a detail brush). The brush is also equipped with a short-cut spray regulator that eliminates paint accumulation and provides maximum air-flow efficiency at the paint tip, again contributing to

tighter line control.

But wait! The 200-20 comes with the new unbreakable non-corrosive one-piece Fast Blast jar adapter. The "ergo" trigger has an ergonomically correct larger trigger button that provides a better trigger feel and more responsive trigger control. The "secure-grip" handle rings provide a more confident airbrush grip. And the PPS paint flow adjusting system enables accuracy in spray pattern and line control to 1/1000 of an inch. Not too shabby.

The 200-20 is constructed of durable nickel chrome finished brass

with a gray anodized aluminum handle. The siphon feed accepts jars or a color cup for smaller jobs.

The complete 200-20 set includes the airbrush, color cup, two mixing jars, Fast Blast adapter cap, wrench and an instruction manual packaged in a black Badger airbrush case. Suggested retail price for all this happiness is a mere \$76.00.

We hope to do a "hands-on" with this brush in the near future and we'll keep you up to date as this develops.

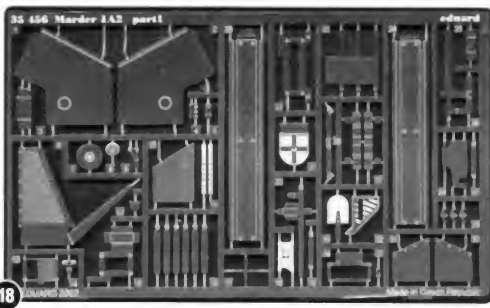
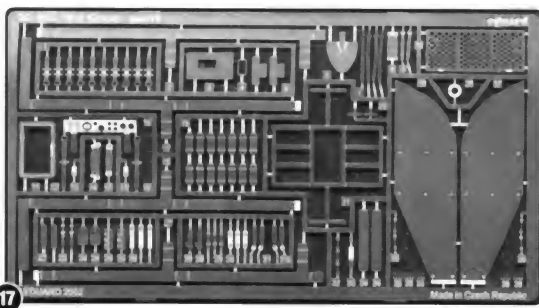
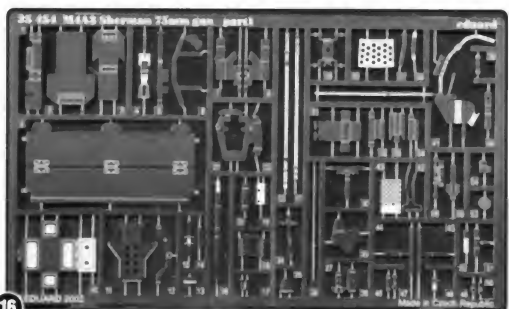
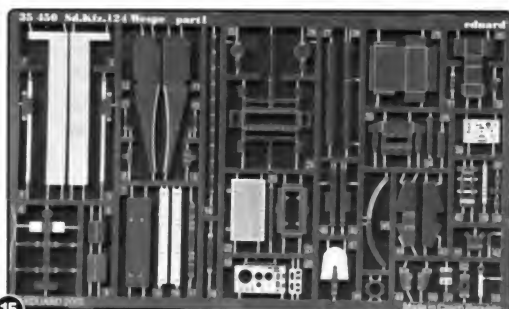
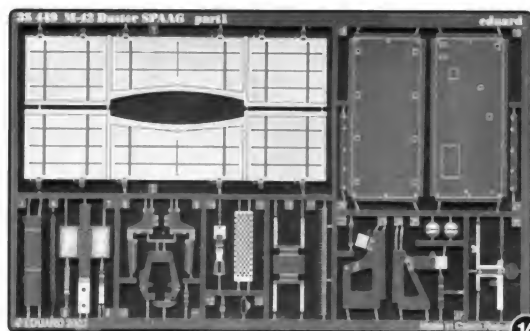
For more information, please contact Badger Air-Brush Co., 9128 West Belmont Avenue, Franklin Park, IL 60131, 1-800-247-2787, e-mail info@badgerairbrush.com, website www.badgerairbrush.com.

Corpus

This is a brand new line that recently popped up out of nowhere. They're from Hungary and, as far as we know, the line includes only five figures. We have information on just three so far and they are 35002, German Mechanic (7); 35004, German Tank Officer (8) and 35005, US Mechanic (9).

As you can see from the illustrations, these are beautifully sculpted and executed figures. The poses are completely unique and each is delicately molded in grayish colored resin. We look forward to seeing the entire line, as it becomes available.

Once again, our samples were provided by Mission Models and they are expected to stock



produced and distributed out of Belgium. Their line is quite diverse and it includes dozens of figures in different scales, as well as diorama and vehicle accessories.

In the diorama column there are several new goodies: DCP 024, Propaganda Posters China from 1960 to 1970; DCP 025, Propaganda Posters Spanish Civil War; DCP 026, Propaganda Posters Cuba Cinema, Art; DCP 027, Propaganda Posters Modern Soviet/1980's Afghanistan Party; DCP 028, Propaganda Posters WWI American (10); DCP 030, Maps Modern Wars/Regional

Conflicts, Afghanistan; DCP 032, Posters Modern Wars/Regional Conflicts, Gaza Strip/Ramallah, etc. (1) and DCP 033, Modern Wars/Regional Conflicts Posters; Gaza Strip/Ramallah etc. (2).

These are all full-color cards and each contains between ten and twenty images.

New in resin accessories are DCWP 011, Replacement tire set for Ural 4320/BM 21 kits (11). A much-needed item, the set includes left and right side tires in separate bags and a spare. All the tires are cleanly cast in tan resin.

In the works for future release are GAZ 66, BTR 152, Scud B, BRDM, BTR Series and Landrover 110 series tires.

Other new resin items to come are Modern MRE's and containers, IDF rations and contents, and VRC 90 Sincgars F series radio sets.

Prices on the listed items are still TBA, but Dream Catcher can be reached at: rue de la Saboterie 4, B-6810 Izet, Belgium. Telephone: (32) 61-320-320. E-mail: dreamcatcher@skynet.be and the web site is users.skynet.be/dreamcatcher.

Eduard

Eduard is another of those terrific companies that have a regular flow of new releases. As always, we enjoy the fact that the sets reflect a mixture of older and newer subjects. The following list also includes the latest in the X-Press Mask series and the turned barrel line. Get ready for a few new projects to pop into your head. 35444, Quad Gun tractor (Tamiya) (12), with Express Mask, dash detail and windshield glass, \$19.99; 35446, M-7 Priest (Italeri), with Express Mask, dash detail and windshield glass, \$22.99; 35447, M3A2 Halftrack (Tamiya), with Express Mask and dash detail, \$19.99; 35448, M60-A1 (Academy) (13), with Express Mask, \$19.99; 35449, M-42 Duster SPAAG (Tamiya) (14), with Express Mask, \$22.99; 35450, Sd.Kfz.124

Wespe (Tamiya) (15), with Express Mask and dash detail, \$19.99; 35452, Pz.IV Ausf. G (Dragon), \$19.99; 35454, M4A3 Sherman 75mm gun (Tamiya) (16), \$19.99; 35455, M-3 Grant (Tamiya) (17), with Express Mask and dash details, \$19.99; 35456, Marder 1A2 (Tamiya) (18), with Express Mask, \$19.99; 35457, FV 101 CVR (T) Scorpion (AFV Club), \$19.99; 35459, M-981 FISTV (Academy), \$19.99; 35461, M-4 Sherman US Marines (Italeri), \$22.99; 35462, Sd.Kfz.184 Ferdinand (Dragon), \$19.99; 35463, Flakvierling 38 20mm (Tamiya), \$19.99; 35464, LVT(A)-1 Alligator (Italeri), \$22.99; 35465, SU-122 (Tamiya), \$19.99; 35466, US 2 1/2 6x6 Cargo Truck (Tamiya), \$22.99; 35467, M-60 Blazer (Italeri), \$19.99; 35468, M-10 (Academy), \$22.99; 35469, Sd.Kfz. 11 (AFV Club), with dash details and windshield clear parts, \$19.99; 35470, Achilles Mk.IIC (AFV Club), with dash details, \$22.99; 35473, Brit. 25 Pdr. Field Gun (Tamiya), \$22.99 and 35474, M-3 Grant with late fender type (Tamiya), \$19.99.

New X-Press Mask items are: XT050, SU-122 Markings, \$4.99; XT051, SU-85, \$3.99 and XT052, VW Type 82 (CMK), \$3.99.

The barrel line continues with 34010, Sherman

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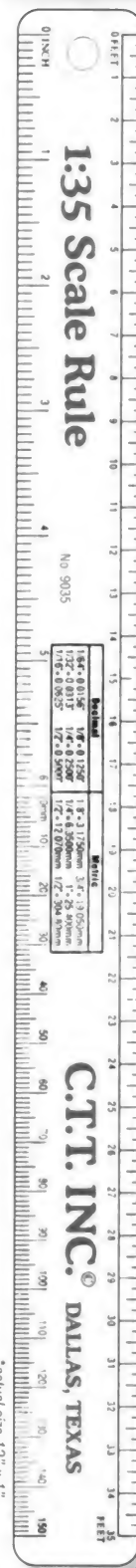
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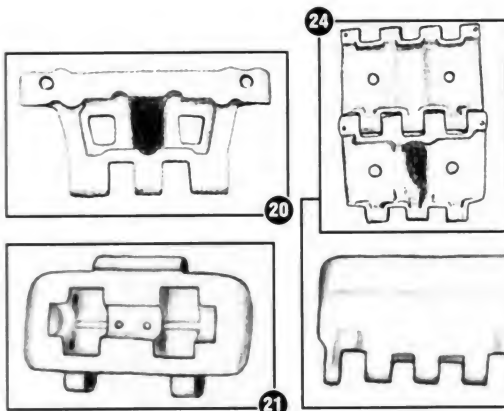
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In new decal sets there is 35550, German License Plates OT, POL, WM Set 3, \$7.95 and 35551, German License Plates OT, POL, WM Set 4, \$7.95.

The newest model accessories are 35401, Ammo Boxes (Panther, 6 pcs), \$10.95; 35403, Ammo Boxes (King Tiger, 6 pcs), \$13.95 and 35577, Towing Hook-Panther, Jagdpanther (20 pcs), \$14.95.

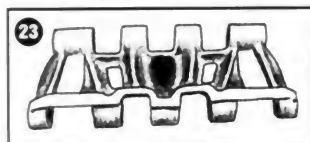
VLS is the source for Elephant in the States and if you're shopping in the UK, Elephant products can be found through Historex Agents.

Frulmodellismo

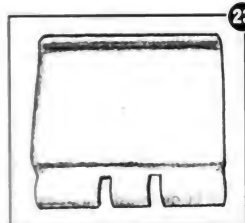
Quite a run this time around from our Italian friends, with no less than seven brand new white metal track sets. ATL-70, Type 97 "Chi He" (20), \$30.00; ATL-71, Matilda, flat type (21), \$30.00; ATL-72, Matilda, T.D. 5910 type (22), \$30.00; ATL-73, Renault FT-17 (23), \$26.00; ATL-74, BT-7 (24), \$30.00 and ATL-75, T-35 (25), \$30.00.

That's some list! We've been waiting for a few of those for a while. Some of them, like the Matildas and the T-35, are totally unique. The complex FT-17 track is molded correctly with its distinctive box shape and the set even includes sleeves for the pins (now, how about an LVT track?).

Frul tracks are imported into the U.S. by Chesapeake Model Designs and are sold at your favorite shop.



VC Firefly (Dragon) (19), \$11.99 and 34017, Tiger II Gun Barrel (improved), \$11.99. Like all



the previous releases, these barrels are presented with the muzzle brake milled right to the ends of the barrels.

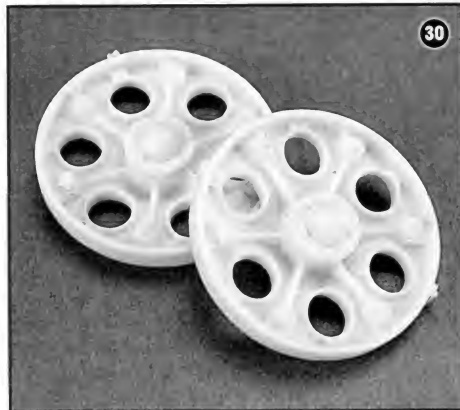
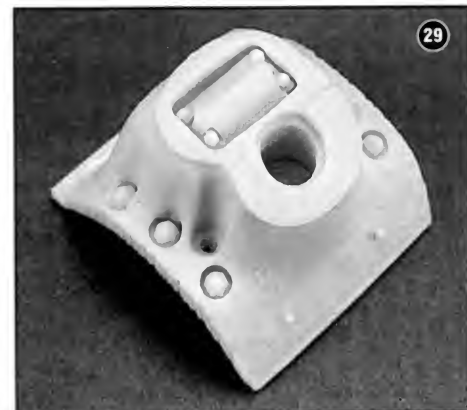
Eduard products are found all over the hobby world.

Elefant Detail Sets

This Czech line of detailing and accessories sets is brought in to the U.S.A. by VLS and the list just keeps on getting bigger and bigger. Here are the newest in straight detail sets. The intended kits are shown in parentheses. 3504, Pz. Kpfw III L, L Command Tank for Pz. III M/N, (RM, DR, GS), \$12.95; 35403G, 75mm Pak 39 L/48 for Jagdpanzer IV Barrel,



(TA), \$5.95; 35404G, 75mm Pak 39 L/48 for Jagdpanzer IV Early, Barrel, \$5.95; 35413G, 45mm Gun for T-26B, (RPM), \$5.95; 35418G, 75mm Pak 39 L/48 For Jagdpanzer IV, (RM, DR), \$4.95; 35419G, 76.2mm Gun for T-28, (ICM), \$4.95; 35449G, 75mm StuK 40L/43 Stug III F, (DR), \$5.95; 35453G, 45mm



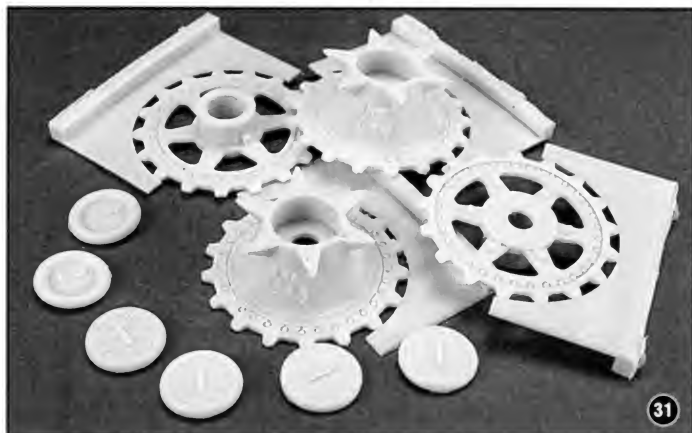
Hobby Fan

Hobby Fan's current list looks like this: 0023, Cougar AVGP 6x6, \$224.98; 0027, M35A1 Gun Truck (II) APC Conversion, \$72.00; 0028, M35A1 Gun Truck (II) APC FSV Conversion, \$99.98; 0520, US Airborne Vietnam (two figures), \$27.59; 0532, Gun Truck Crew (one figure), \$31.95; 0533, Gun Truck Crew (two figures), \$31.98; 0534, Sd.Kfz. 11 Crew (one figure), \$33.98 and 0535, Sd.Kfz. 11 Crew (two figures), \$33.98; HF036, M163 Vulcan Conversion, \$179.98; HF037, Sd.Kfz. 11 3t Engine/Fuel Tank/7.5cm Ammunition Room Conversion, \$69.98; HF038, M-167 Vulcan Six Barrel 20mm Gatling Gun AA Weapon System (U.S. Army and JASDF), \$7BA; HF536, Sd.Kfz. 11 Crew (3) Africa Korps, 2 figures, \$37.98; HF537, Sd.Kfz. 11 3t Eastern Front Crew (1) 2 figures, \$37.98.

For more skinny, see www.marcoimport.com

Legend

Legend, the prolific Korean company, now has the following new products available. 1042, IDF Puma APC, full kit, \$139.98. The Puma is a full kit of the Israeli-converted Centurion MBT. The kit is very elaborate, with tons of resin and large slabs of photo-etch. 1039, is Ammo Box Set, \$8.48 and it contains a large selection of .30 and .50 cal ammo boxes. 1040, Rivet Set 3 piece, has an enormous variety of scale hardware all molded flat onto resin runners for \$8.48. 1041, Chained Wheels & .50 cal MG for Willys Jeep, is a



Mirage Hobby

Also in the 1/72nd realm, we have four new kits from Mirage Hobby and these guys are nice. The kits are very well molded and have excellent instruction sheets, plus a set of water slide decals. As with most kits of this scale they have rubber band tracks. Here's the new list: MG 72601, Czolg Lekki 7TP (**26**), \$11.98; MG 72602, Czolg Lekki Dwuwiezowy 7TP (**27**), \$11.98; MG 72603, Czolg Vickers E Mk. A, \$11.98 and MG 72604, Czolg

Vickers E Mk. B, \$11.98. If you've never thought of checking out the smaller scale stuff, this might be a great time to do it.

New in 1/35th scale fun is MG35106, T50 AA Light Tank, \$24.98; MG35107, PzKpfw. II F Luchs WWII, \$24.98; MG35108, SdKfz 123 Light Recce Tank WWII, \$24.98; MG35212, 37mm Bofors AT Gun, \$5.98; MG35216, Universal Transport Vehicle Towed, \$5.98; MG35515, TKS/MG 15 Tankette with trailer, \$19.98; MG35901, C7P Heavy Artillery Tractor WWII (**28**), \$19.98; MG35902, C7P (p) "Klara" German Recovery Vehicle WWII, \$19.98 and MG35903, C7P Universal Transport Tractor Russian Version, WW II, \$19.98.

Modeling Artisan Mori

We are still receiving samples of the latest Mori stuff, thanks to their U.S. importer, MGP05, Drive sprockets for Panther series (**31**), is perhaps a little out of date now with the DML release. However, the set does contain three different types of hubs for the center of the sprocket, all for \$18.50. MRP07, KV-1S Gun mantlet (#2) (**29**), \$13.00, is a sweet little resin part to soup up that KV-1S conversion you've had in mind. MRP08, T-34-85 late standard type drive sprockets (**30**) brings up the rear. The set contains two drive sprocket halves to place over the existing DML bases for \$13.00. This is a handy item as it allows you to accurately duplicate the sprocket seen on many late and post-war vehicles.

Mission Models imports Modeling Artisan Mori into the U.S.

Model Point

Model Point, makers of all things amazing, has these new tasty bits of miniature tooling available. 3512, Howitzer prod. 1937 152mm ISU-152 (Zvezda/Eastern Express) (**32**), \$20.00; 3532, Pak 43/2 L71 8.8cm barrel Tiger II, (Tamiya), \$15.00, 3535, 37mm barrel M3 Stuart MK I (Tamiya, Italeri), \$6.00; 3543-1, 85mm D-5T Barrel SU-85 (Tamiya), \$13.00; 3554, 23mm ZU-23 Barrel ZU-23-2 (Eastern Express), \$20.00 and 3561, 122mm barrel D30 howitzer, (SKIF), \$15.00.

In the "scary" category this time is the ISU 152 barrel. This has the very complex slotted muzzle milled right into the barrel. Whew! Also squarely in this category is the ZU-23 set, which contains many of the additional small parts necessary to detail this complex little AA gun. Good stuff.

Model Point products can be found through Mission Models, VLS and many other shops and retail outlets.

Monroe Perdu Design Studios

Here's a new one for you. These guys have been wowing a small group of modelers in Southern California with their diorama accessories for some time now. Their products are starting to become easier to find and find out about. Their approach to products is very unique, as is their choice of materials.



elaborate accessory set for your next Willys Jeep project. The set contains both resin and photo-etched details for \$8.48.

Legend products are imported into the U.S. by Squadron Mail Order.

Lincoln County Line

Lincoln County Line is an "in-house" line of the VLS Corp. It's fairly new and the idea behind it is to offer more value priced merchandise that is somewhat simpler in execution.

In addition to the new figure sets reviewed in the Mini-Men section there are: LC 0001, Command Bunker, \$15.95; LC 0006, Vignette Ruins #1, (contains 2 ruins), \$11.95 and LC 000, Troop Shelter/Field Hospital, \$14.95.

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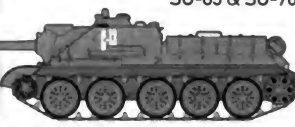
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Here's the new stuff we know about so far. **MPD 008, Provincial Well (33)**, \$9.00, is a teeny resin beauty, as is **MPD 010, Small Well (34)**, \$9.00. **MPD 013, Tree Grates**, \$8.00; **MPD 014, 2 Bistro Tables, 4 Chairs and checkers**, \$19.00 and **MPD 015, 2 Café Tables, 4 Chairs and Backgammon**, \$19.00 are all laser cut card stock. This has been a popular medium in the model railroad world for some time. We have always wondered when someone was going to take advantage of this wonderfully diverse medium in our end of the hobby. The process is simple. A very fine (we mean very) laser traces a pattern through the stock and the resulting parts can be cut out by severing one or two fine connecting points. This is ideal for rendering flat, repetitive parts, like those listed above. It has all the fidelity of brass, but none of the difficulties. Assembly is simple, too, using super glue or white glue.

We look forward to seeing a lot more from these guys in the future. For more information about the entire line of MP products contact them at 3168 Renee Court, Simi Valley, CA 93065. E-mail: mperdu@pacbell.net.

RHPS Models

RHPS has released the British version of the Sherman steel chevron track. This differs from the U.S. version, around the chevron and with the presence of two face rivets. It's a pretty interesting version that is seen on many British Shermans.

This, like all of the other RHPS tracks, utilizes the easy to use press-fit semi-workable system. The official designation of this set is **T74, UK Chevron individual link track set (36)**. The set sells for \$21.95.

PSP

To go along with their M4 High-Speed tractor and other Long Tom items, PSP has released a corrected

wheel set for the AFV Club kits. Many wartime Long Toms featured a civilian pattern tire, rather than the original non-directional 11.00-20 tires (although these were also seen).

The set is officially known as **35039, Road Wheels for 155 or 203mm (35)**. The parts are neatly cast in tan resin and the set includes hubs, as well. We received our sample from Mission Models, which is one of the few (if not the only) importers of their line into the states. Their listed retail is \$25.00.



PSP products are also available in Europe. For more information there, check with them via e-mail at pspmmodels@wanadoo.fr

Scale-Line

Scale-Line hails from the Netherlands and they have a nifty little line of resin kits and accessories. Although it's not exactly brand new data, we recently became aware that they are producing a complete kit of the World War Two Diamond-T tank transporter. This is **35040, Diamond-T 981 Recovery Tractor & 45-ton Tank Transporter Trailer (37)** and it retails in the U.S. for a hefty \$400.00. This is about what

you would expect for a kit as elaborate as this. It contains hundreds of parts stuffed into various plastic bags, along with large castings for the cab, frame and trailer bed. It also bears mentioning that this is actually two full resin kits, the tractor and the trailer. Don't forget, the trailer alone has 12 wheels!

There were two versions of the tractor produced during the war and the model depicts the soft-cab version. This was the type used most by U.S. troops, although the hard cab version was seen. Don't let anyone tell you the US did not use this baby. It was fielded in significant numbers and in many roles besides as a tank transporter. All of the parts of the kit are cleanly cast in tan resin and although all of them are mounted on large pour plugs, they are virtually bubble free.

Initially, these models were very hard to find or to even find out about. Although we attend two European shows each year, we still found it hard to pick up information on the model. Luckily, VLS has imported a few of them and they were kind enough to let us look at one. Their stock is small, so if you want one, don't wait too long. We have subsequently found out that the kit will be limited by Scale Line to only 500 kits worldwide and then that's it.

For more information on how to purchase this kit, see the VLS website at www.modelmecca.com

Sovereign 2000

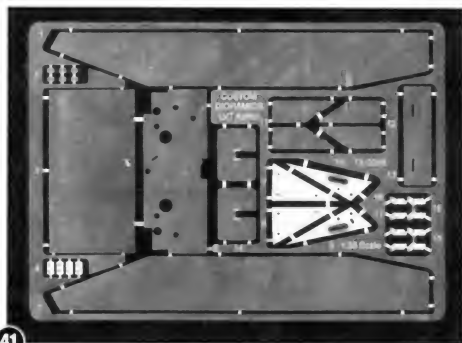
Hey, remember these guys? They were once well known for a line of hard-to-find German subjects. Many of these kits were subsequently released in plastic (the Sd.Kfz. 11 is one example). However, over the

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 Typ 82 Wehrmacht



40

last two years the company and its product line has been updated, streamlined and expanded with some fairly exciting results. Here are a few of them. S2KG001, 2 Pdr Anti-Tank Gun (38), \$55.00 and S2KV005, Panzer III Ausf A. (39), \$115.00.

The 2-Pounder is a brand new kit and it's a very attractive looking model that will, no doubt, be very popular with the Brit armor crowd. It contains a smart mix of resin and white metal pieces. This is scheduled for future review.

For the German armor freaks, the Panzer III is a release. However, this kit has been vastly improved over its earlier incarnation. We built the original kit for review many years ago and we can say that this new kit is super nice. Many of the improvements simply involve the casting quality, which is now fantastic. However, many of the components are newly mastered, or now are rendered in resin instead of metal. The kit still includes white metal tracks, which are clever non-workable strip and link. The remaining metal parts are sensibly chosen as very small or delicate parts.



43

The instructions are some of the nicest we've seen for a resin kit. The photos, although black and white, are large and clear. Although they appear to be some type of photo-copy, the quality is excellent.

All in all, a fine looking little model and one we are looking forward to diving into in the near future.

Our samples were provided by Mission Models.

Tamiya

You know, over a period of many years, we've gotten to be real pigs when it comes to Tamiya. ("What? Tamiya's ONLY doing two Pershings this year?") We are always extra hungry for Tamiya news and with information literally zooming around the internet, true surprises are now a thing of the past.

We can tell you that Tamiya will finally be releasing a second version of their awesome 1/16th scale Kübelwagen. 36205 will be German Kübelwagen Type 82 (European Campaign) (40) and it will retail for \$94.00.

As expected, Tamiya has acknowledged that it will be releasing another Marder, in the form of the Marder IIIM. This version was armed with the 7.5cm gun and it was mounted towards the back of the superstructure. This kit will include an all-new 7.5cm gun and other goodies. Look for the kit to be officially announced by the end of 2002, with availability soon after.

As always, the place for hot news is www.tamiya.com. Also check out the Japanese language version, as they tend to run a few days or even weeks, ahead of the English version.

Trakz Armor Products

Trakz is other new in-house line that we announced in the last issue. This line will feature the lion's share of the new armor stuff from now on. Well, they're off to a great start.

Here's the current list as we know it. TX 0008, LVT Up-Armor Photo Etch Detail Set (IL) (41), \$22.95; TX 0011, Panther A Detail Set (Photo-etch), \$22.95; TX 0012 Panther A (Late) Exhausts (Resin & Photo-etch) (42), \$9.95 and TX 0013, Panther A Cooling Intake Screens (Photo-etch), \$8.95.

We believe they take the award for the first U.S. company to do sets for the new Panther. The LVT stuff is especially exciting and we have started what will become a reoccurring series on utilizing these sets on the Italeri kits.

Like the other VLS lines, this one also produces new items each month, so check out www.modelmecca.com for the very latest dope.

Trumpeteer

Armor releases from this Chinese company haven't been heralded with great fanfare, but their future release list has been causing a stir for a while now. We have been hearing rumors that their aircraft tooling team, which has been turning out terrific 1/32nd scale kits, will eventually be shifted to the future 1/35th scale armor items. Well, these guys appear to be on the job.

The latest armor release is 2301, BJ212A Chinese Army Jeep with 105mm Type 75 Recoilless Rifle (43). This is a vastly different kit than anything they have released before. Although the subject is quite obscure, the kit is very well done and puts one in the mind of Skybow or AFV Club. The

listed U.S. retail is \$24.95 and it is available now.

Trumpeteer is found wherever plastic is sold.

Verlinden Productions

As a continuing public service, this is the current VP list culled from their website at press time. 1774, Panzer IV Zimmerit & Details, \$26.95; 1784, StuG III G Zimmerit, \$19.95; 1792, King Tiger Interior, \$44.95; 1796, King Tiger Zimmerit & Details, \$28.95; 1772, Coffee Please, German WWII 2 figures, \$13.95; 1776, British Paras Bren Team WWII, 2 figures, \$13.95; 1777, German Casualties WWII, Winter, 2 figures, \$13.95; 1779, US Airborne Screaming Eagle, \$13.95; 1780, US Tanker Captured WWII, 2 figures, \$13.95; 1790, US Marines IV WWII, 2 figures, \$13.95; 1791, German Infantry WWII, 2 figures, "Get Down," \$13.95; 1799, Newspaper Salesman WWII, 1 figure, \$6.96; 1800, German Paras Head Set WWII, 8 heads, \$6.95; 1801, U.S. Marines Running WWII, 2 figures, \$13.95; 1802, Chow Time German Tankers WWII, 2 figures, \$13.95 and 1803, Breakfast German Tankers WWII, 2 figures, \$13.95.

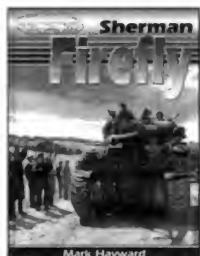
Woodland Scenics

Woodland Scenics has been great in keeping us up-to-date on all of their new products. Here's the latest. FC1638, Forest Green Underbrush, \$9.98 and FC1644, Olive Green Bushes, \$9.98. These both contain loose foliage in shaker-type containers for making trees and bushes.

C1207, is The Scenery Manual and R993, is a Scenery Made Easy Video. These are both highly useful tools for making miniature scenery. Although they are oriented towards the model railroad crowd, you'll find tons of valuable information in both. The booklet even contains the entire Woodland Scenics product list. The book retails for \$9.98 and the video for \$24.95.

Woodland Scenics products are found at most shops that carry railroad items.

Book Reviews



Sherman Firefly
by Mark Hayward
Barbarossa Books
Hardcover
216 pages, B&W with color plates
ISBN 0-9538777-2-8

THE FIREFLY HAS ALWAYS BEEN one of those "niches within a niche." If building and collecting 1/35th scale armor isn't obscure enough, some modelers have made this version of the Sherman their little obsession.

If you are not familiar with the story of the Firefly, the short version is that the British decided to take their Lend-Lease Shermans and stick the relatively deadly 17-pounder anti-tank gun in the turret. This suddenly made the Sherman into a worthy adversary of the Panther and the Tiger (one is said to have knocked out Michael Wittman's tank). There were several different versions of the tank and venturing into the subject is no easy task.

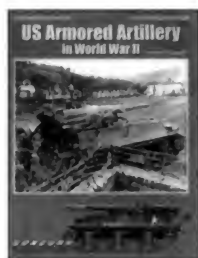
This hardcover book covers a substantial amount of ground in only 216 pages. The early attempts are documented and the amount of combat photos can only be described as lavish. The book is chock full of statistics, too. Various charts and tables interrupt the text to explain things like unit combat readiness, dispersion and other useful info.

Bringing up the rear are dozens of shots of museum and monument Fireflies. The more pristine vehicles are shown in much greater detail. These photos are supplemented by a crisp series of line drawings. Smaller detail drawings are also sprinkled throughout the rest of the book.

The last 17 or so pages of the book are devoted to what it takes to create an accurate scale model of the Firefly. This includes a thorough discussion of the various kits and aftermarket parts.

The listed bibliography contains just about as much modeling as historical material and the whole book ends up being a real home run in our estimation. What more could one ask for?

If you are looking for a single source or a terrific starting point for gathering other references, this is the one.



US Armored Artillery in World War II
by Steven J. Zaloga
Concord Publications
Company
Soft Cover
72 pages, B&W with color plates
ISBN 962-361-688-0
\$14.98

THE CONCORD SERIES CONTINUES to refine the term "value for money." The latest title covers no fewer than six different vehicles within its 72 pages. The M7, M8, M12, T30, T19 and many others are depicted with well over two hundred clear photos. Many of these shots are very useful to the modeler and there are quite a few interior shots, as well.

Like other books in the series, this title contains eight pages of concisely rendered color profiles. The majority of them are of the M7, but there are several of the M8 and the M12, too. All of the profiles showcase a variety of fascinating color schemes and markings.

With the proliferation of both old and new kits on these subjects, as well as a slew of aftermarket goodies, this book is a definite must.

Pershing/Patton
by Jim Mesko
Squadron Signal Publications
Soft Cover
49 pages, B&W with color plates
ISBN 0-89747-442-2
\$8.95



WHAT? ANOTHER BOOK on the Pershing? Don't we have enough of that stuff already? Well, now wait just a minute—this is a Squadron book. And, remember the title,

these cats are giving us the whole story here, not just bits and pieces. The story starts with early Pershing prototypes and runs right down to the M47.

Like all the Squadron "In Action" books the format is to explore the development of the tank and then depict the vehicle in combat situations. To that end, there is a solid selection of combat stuff from WW2, Korea and even the mid-east and Pakistan, in the case of the M47. A great selection of close-up shots of existing vehicles is also thrown in for good measure.

And, as usual we get all that smashing color artwork. A full center spread of profiles is included, along with both cover and back cover artwork. A full eight profiles are shown and five of these contain front or overhead views. With the other three larger pieces, it's just about worth the price right there.

Go ahead and slide this one onto the bookshelf along with the rest!

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0017	M4 with pieces/wood applique	7.00	0072	M4A1 Cast Hull Forward Vision Slots	16.00	A005	MB detail set for Tamiya kit	6.50
0018	M4 3 pieces/steel applique	7.00	0073	M4A3 E2 complete Jumbo conversion for Tamiya's M4A3 lower hull	17.00	A007	GPW/MB conversion	11.50
0019	M4 3 pieces bolt nose	8.00	0074	M4 Hull detail set (tools, vision block, cable tie downs, etc.)	6.00	A008	MB cargo rack	7.50
0020	M4 Early cast nose	7.00	0076	Early M4 Sherman suspension	17.00	A009	MB armor set for Tamiya kit	9.50
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0022	M4 early fighting compartment, interior	50.00	0083	M38A1 Jeep tires with chains	8.00	A023	CKKW armor set for Tamiya kit	12.50
0023	M4 late wet storage lighting compartment	50.00	0087	M8 Armored car tires with chains	13.00	A024	CKKW deep wading set (white metal) Tamiya	7.50
0024	M4A2 conversion set	9.00	0088	LRDG Chevrolet truck wheels and tires with 2 spares	12.00	M3001	M3 Stuart detail set (Tamiya kit)	5.50
0025	M4A3E2 Jumbo turret set with aluminum barrel	18.00	0089	GI gas cans in trays with straps	6.00	M4005	M4 Sherman detail set (Tamiya M4A3 kit)	5.50
0026	M4 Late dish wheels	10.00	0090	American 5 gallon oil cans	5.00	M4007	M4 Sherman detail set (Tamiya early M4)	5.50
0027	M4 pressed wheels (detail on both sides)	9.00	0091	M4 Sherman upper hull rear vents	3.00	A026	Deep wading kit for M 3 V2 track	9.00
0029	Cullin Hedgerow cutter (angle iron teeth)	9.00	0092	Pershing 90mm canvas covered flash suppressor	3.00	A031	Walker Bulldog M41 Photo etch sheet	10.50
0030	Cullin Hedgerow cutter (T-bar teeth)	9.00	0093	M26 (M25) Dragon Wagon wheels and tires	24.50	A0327	M24 Chaffee Photo etch sheet	8.50
0031	Cullin Hedgerow cutter (I-beam teeth)	9.00	0094	M123C 10-ton tractor	98.00	A034	Deep wading kit for M8 armored car	9.50
0032	76 mm turned aluminum gun barrel	7.50	0096	M26 Pershing Mantlet with Dust Cover	5.00	A039	M38A1 Deep wading kit	10.00
0035	M4 radial engine and engine compartment	35.00	1066	German gas cans with grenade attached (3)	2.00			
0036	M4 Early int. w/radial eng. & eng. comp. detail	70.00	1075	Wooden crates-3 medium and 3 large	5.00			
0040	M4 late 75 mm turret with open loader's hatch	9.00	2023	(Fu) Sdkfz 223 armored car interior	20.00			
0041	M4 radial powered tank, deep wading kit	18.00	2045	Tamiya Flack 88 wheels and tires	10.00			
0042	M4A3 early conversion set	9.00	2046	Sdkfz 251 and Hanomag 8 ton front wheels with snow shoes	6.00			
0043	M3 suspension replacement set (Tamiya M4 kit)	16.00	2047	Tamiya 8-ton spoke wheels with civilian pattern tires	3.50			
0044	M4 Sherman, M34 mantlet conversion set with 75 mm aluminum barrel	9.00	2048	Tamiya 223 armored car wheels with chains	6.50			
			2049	Tamiya 4 x 4 Horch wheels with chains	6.50			
			2050	Early Tiger I flash suppressor with canvas cover	4.00			
			2051	Late Tiger I flash suppressor with canvas cover	3.75			
			2052	Panther flash suppressor with canvas cover	3.75			
			2053	Pz. Mark IV suppressor with canvas cover	3.75			



Please Note: Our Sherman hulls are designed to kit bash with the Tamiya Sherman kits on the market. Those marked with open deck are for use with the Tamiya decks in their M4. Those not marked with open deck are cast-closed. Our M4A2 & A3 conversions have their own deck plate.

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The Idea Bank

The following is an extension and compilation of all the wish lists and “we gotta haves” that have appeared in the magazine over the years. The list also reflects a few brain storming sessions where we just sat around with a few books and shouted out what we liked.

We have divided it into three categories: plastic kits; resin kits; and conversions and updates. A few of the ideas appear in both the plastic list and the resin list. Most

would pick plastic over resin due to the cost, but we’d be glad to have either. A lot of what’s listed is rather obvious, like the German half-tracks. A few of the plastic ideas are rather odd, but the entry of the eastern European companies into the fray has demonstrated that the sky’s the limit.

Basically, we don’t warranty any of the items listed. We think they are all sound, but we are not saying they will all sell. The deal is that if you are a manufacturer, large or small, and you see something you like, then by all means make a withdrawal—it’s free! All we ask is that you let us know so we can strike it from the list.

If there is something that you don’t see here, then by all means feel free to make a deposit—no matter who you are.

Please note that items that have been announced or listed since the previous issue are shown with a line struck through the subject. Notes on who and where follow. Items are generally displayed like this for one issue, then removed completely.

Plastic Kits

British Triumph Motorcycle

WW2. We’ve had the German bikes in plastic, but never this one.

British Bedford 15-cwt 4x2 truck

WW2. Very numerous soft skin.

British Morris-Commercial 30-cwt 6x4 truck

WW2. Just because it’s neat looking.

British AEC Matador 4x4 truck

WW2. Useful for hauling around all that scale artillery.

British Humber Mk I Armored Car

WW2. 4,300 of them were used on all fronts.

British 17-pdr Archer SPG

WW2. We’ve been promised one from VM, but it’s still a no-show. The towed gun wouldn’t hurt either.

British Saladin

Post war. Widely used six wheeled armored car.

British Cruiser Comet

WW2. ICM once had it on their box sides, but rumor has it that it’s canceled. BACK ON AS ICM STOCK NUMBER 35091.

British Cruiser Challenger

WW2. A logical follow-up to the Comet.

British Centurion

Postwar. Many variants, used extensively by the Israelis as well as the Brits.

British Mk VIB Light Tank

WW2. Widely seen and used in the west and in the desert. It seems a natural in plastic.

British Sherman “Flail” Tank

WW2. Maybe based on the DML M4A4 kit?

British Bofors 40mm AA gun

WW2. This was the Swedish designed gun used by the British and others.

British Daimler Mark II

WW2. The neat little armored (or is it armoured?) car.

British Sexton II

WW2. The Canadian version of the Sherman chassis (Grizzly) with the 25 pounder field piece mounted on top. Do the Grizzly, too, while you’re at it.

French Char B1

WW2. The famous French heavy tank. ANNOUNCED FROM RPM

French AMR35

WW2. Cool little cavalry tank.

French FCM36

WW2. French medium. Later used by the Germans as an SPG platform.

French Laffly/Hotchkiss S15R

WW2. Early war six-wheeled artillery tractor. Also the S20TL and the S35T.

German Panzer II variants

WW2. Still missing the A, B, and F in a “modern way.”

German Panzer III variants

WW2. Still missing the A, B, C and D.

German Panzer IV variants.

WW2. Still missing the A, B, C, and a modern tooled D.

German Panzer III/IV hybrid

WW2. While you’re at it. Used an interleaved suspension.

German Neubaufahrzeug

WW2. Early war medium. Hey, why not?

German Lorraine Schlepper with 10.5cm

WW2. French tractor converted by the Germans.

German Lorraine Schlepper with 7.5cm

WW2. French tractor converted by the Germans.

German Panzer I B 15cm sIG 33

WW2. The one with the tall superstructure.

German Marder III M

WW2. The 7.5cm gun rear mounted in a modified 38t chassis. SAID TO BE ON THE WAY FROM TAMIYA.

German Flakpanzer 38(t)

WW2. Similar to the above listed vehicle, but with the 2cm gun.

German Karimörser

WW2. Sooner or later, right?

German Halftracks

WW2. Scratch the FAMO, but how about the SdKfz. 9, 10 and the Demag D7 (a new SdKfz. 7 wouldn’t hurt either). Come on man—PLEASE! There’s tons of variants, too.

German SdKfz. 251/20 UHU

WW2. The IR searchlight vehicle. This would make an outstanding Tamiya kit, don’t you think?

German SdKfz. 251/21 Drilling

WW2. The triple flak mount. Tamiya?

German SdKfz. 251/22

WW2. With the Pak 40 75mm. Need we say more?

German PAK 43 8.8cm

WW2. The anti-tank gun with the cruciform base. Hey Dragon, how about the gun from the Nashorn?

German 15cm gun

WW2. The widely used heavy artillery piece (Dragon Hummel!). We’d also love to see the 17cm and the 21cm in plastic.

German 10.5cm

WW2. We thought Tamiya would do this for sure after the Wespe. 3 variants. ON DECK FROM AFV CLUB.

German Hummel SPG

WW2. Sorry, but we still need a really good one. The chassis is the the bigger. Ditto on the Nashorn. A BRAND NEW, NEWLY TOOLED NASHORN HAS BEEN ANNOUNCED BY DRAGON.

German SdKfz. 231 8-rad

WW2. Modified version of the original. Used mid to late war.

German SdKfz. 263 8-rad

WW2. We have the New Connection conversion, but how about some plastic?

German SdKfz. 247

WW2. Little armored 4x4 used by recon battalions.

German V3000 Ford truck

WW2. Similar versions were used by all the WW2 combatants.

German Bussing-Nag Truck

WW2. The basic truck, the AA version and the crane, too.

German “Büro-Anhänger”

WW2. The large boxy trailer hauled behind the Opel Blitz.

German Opel Blitz Bus

WW2. It seems like an Italiener natural.

German Mercedes-Benz G4

WW2. Mostly known as Hitler’s six wheeled staff car, but also used as a regular heavy car in the field.

German ie.gl.E.Pkw.

WW2. The little Stoewer or BMW light 4x4 cars. Several variants.

German Einheits-Diesel 1.5 ton 6x4 truck

WW2. Very common throughout the war, several versions fielded. There were also 1.5 tons from Krupp and Mercedes.

German Faun Typ L900

WW2. Very large tank transporter truck (it carried the tank on its back). Towed a big trailer, too.

German Mercedes-Benz L 4500

WW2. 4.5 ton cargo truck. Also used as a very unusual “Maultier” version.

German Hanomag Typ St 100

WW2. Developed for both the Luftwaffe and the Wehrmacht, it was used to haul long supply trains and bridging equipment.

German Schwimmwagen “Trippl”

WW2. Early contender to the VW throne. Used by the SS.

German VW Itlis

Modern Bundeswehr Jeep. Also used by other NATO members.

Hungarian Toldi

WW2. There are several variants, too.

Italian Fiat/Ansaldo AB40/41

WW2. 4 wheeled armored car, also used by the Germans in Italy.

Italian L3/35 tankette

WW2. We’ve got a few resin versions, but it’s not a very big kit...

Italian Carro Armato L6/40

WW2. Another teeny thing, some served in Russia (scary).

Italian Semovente L40 47/32

WW2. Assault gun version of the L6/40. Also used by the Germans.

Polish Fiat 508/518 Mazur field car

WW2. One of the most common soft skins used by the pre-war Polish army. Over 10,000 produced. It seems like all the armor’s getting done. Anyone?

Soviet 203mm gun

WW2. The one with the tracked carriage.

Soviet Stalinets Tractor

WW2. Soviet copy of the Caterpillar 60 tractor. Pulled the 203.

Soviet BTR-60

Post-war eight wheel armored car.

Soviet SA-2

Post-war mobile truck mounted SAM system.

Soviet BMD-1

Modern air-mobile infantry support vehicle.

Soviet ASU-85

Modern air-mobile tank destroyer.

Swedish S-Tank

Modern. That weird looking turretless jobby.

U.S. M1A1 Wrecking Truck

WW2. Terrific looking heavy wrecker made by Ward LaFrance.

U.S. M2/M2A1 Halftrack

WW2. The one with the shorter back end.

U.S. M3/M3A1 Halftracks

WW2. We’re still waiting for contemporary plastic versions of this series. Help us Obi-wan Tamiya, you’re our only hope...

U.S. M4 High Speed Tractor

WW2/Korea. Towed the Long Tom and used Sherman tracks. Think of all those lonely AFV Club kits.

U.S. M5 High Speed Tractor

WW2. Loosely based on the M3 in the suspension area. Hauled the 105, 155 and the 4.5 inch gun.

U.S. M6 High Speed Tractor

WW2/Korea. Successor to the M4, also towed the Long Tom and the 8-inch howitzer.

M8 ammo trailer

WWII/Korea. Seen behind the M8 HMC and others.

U.S. M10 ammo trailer

WW2. Pretty numerous on all fronts and commonly seen with the M7 Priest and the M8 HMC.

U.S. M19 Motor Carriage

Korea. Dual 40mm mounted on the Chaffee chassis.

U.S. M23 8-ton 4-wheel ammo trailer

WW2. Weird looking, but pulled along with every Long Tom.

U.S. M29 Weasel

WW2. The Monogram kit was a loooooong time ago. Both variants.

U.S. M31 ARV

WW2. Recovery version based on the Lee/Grant series.

U.S. M37 Motor Carriage

Korea. 105mm mounted on the Chaffee chassis. Interestingly, this is the exact same gun that was mounted in the 105 Sherman.

U.S. M40 Motor Carriage

Korea. The Long Tom mounted on a "Easy Eight" type chassis.

U.S. M41 HMC

Developed at the end of WW2 and used in Korea. The 155mm howitzer on the M24 chassis. AVAILABLE IN RESIN FROM CMK.

U.S. M43 Motor Carriage

Korea. The 8-inch howitzer mounted on a "Easy Eight" type chassis.

U.S. M44 SPG

1950's. One of a series of SPGs based on the M41 chassis. Also the M52. Used by other NATO nations—especially Germany.

U.S. M55 SPG

1950's. Big-ass SPG loosely based on the M46/M47 chassis. Used by other NATO nations—especially Germany.

U.S. DUKW-353

WW2. You know the floater. ON THE WAY FROM ITALERI AS STOCK NUMBER 6392. NO WORD ON A DATE.

U.S. GMC 352

WW2. The short wheel base version. Hey Tamiya, come on!

U.S. 4-ton "Diamond T" 6x6 Truck

WW2. Cargo, dump and fabulous wrecker version. AVAILABLE THROUGH ROY MODELS AND ANNOUNCED BY ACCURATE ARMOUR IN RESIN.

U.S. Mack NO 7.5 ton truck

WW2. Towed the 8-inch howitzer. Huge and just plain cool.

U.S. 240mm Howitzer

WW2. Widely used, but rarely photographed.

U.S. 75mm Field Howitzer

WW2. Also known as the "Pack" gun. Remember the old Tamiya metal one?

U.S. Staghound T17E1

WW2. U.S. built 4-wheel armored car almost exclusively used by the Brits.

U.S. LVT Series

WW2 & Korea. The whole series please: LVT-2; LVT (A)-2; ~~LVT-4~~; LVT (A)-1; LVT (A)-4; LVT (A)-5 and LVT (A)-5 modified. ITALERI'S CRANKIN' THEM OUT AND TRAX IS DOING CONVERSIONS.

U.S. Ontos

Post-war and Vietnam anti-tank tractor.

U.S. V-100

Post-war and Vietnam 4-wheeled armored car fielded in several different versions.

U.S. M422 "Mighty Mite"

Post-war miniature version of the Jeep.

U.S. M992A2

Modern NATO. The artillery ammunition carrier based on the M109. Hey Italeri!

U.S. M715 Jeep 1-1/4-ton cargo truck

Modern and widely used truck. Saw use in Vietnam.

U.S. M561 Gamma Goat

Modern and weirdo six wheeled cargo truck.

M198 155mm howitzer

Modern. Used in Desert Storm and still the primary U.S. towed arty. Towed by the 5-ton.

Resin Kits

Belgian T-13 tank

WW2. Early war Belgian mini tank. There is a SPG version, too.

German Geschützwagen III/IV (Sf)

WW2. Similar to the Grasshopper, with the 105mm gun plopped into the superstructure. The Brits still have one somewhere.

German Praga T6-SS tractor

WW2. Used the same tracks as the 38t series.

German Panzer III/IV hybrid

WW2. Also in the plastic list. Used an interleaved suspension.

German Mercedes Unimog U 900 truck

Post war NATO. Also used extensively by the U.S. Army and Marines in a variety of interesting configurations.

German Heavy transport trailer

WW2. Actually used to move heavy railroad equipment, but also used to move the super heavy tanks and the Karl Mörser.

Soviet KRUG long track SA-4 radar

Post war. Lengthened version of the AT-T tractor with a large radar unit on top.

Soviet 2S7 203mm SPG

Post war. Enormous "nuclear" self-propelled artillery piece.

Soviet AT-T tractor

Post war. Basically a big truck loosely based on the T-55 chassis.

U.S. M114 armored recon vehicle

Post war. Cousin to the M113. Also used by the ARVN.

U.S. M6 or M6A1 Heavy Tanks

WW2. Actually standardized in 1942, but never deployed.

U.S. M6 High Speed Tractor

WW2/Korea. Also towed the Long Tom and the 8-inch howitzer.

U.S. M22 Locust

WW2. Wacky airborne tank. ANNOUNCED FROM COMMANDER.

U.S. M23 8-ton 4-wheel ammo trailer

WW2. Word looking, but pulled along with every Long Tom. ANNOUNCED FROM PSP.

U.S. FMTV Truck Series

Modern cab over trucks. Widely used everywhere today.

U.S. OPFOR Sheridan

Modern. Hey Jaguar, what do you think?

U.S. Quickway crane and white truck

WW2. Awesome truck and crane combo also includes a trailer.

U.S. 4-ton "Diamond T" 6x6 Truck

WW2. Cargo, dump and fabulous wrecker version. AVAILABLE THROUGH ROY MODELS IN RESIN AND ANNOUNCED BY ACCURATE ARMOUR.

U.S. Staff Cars

WW2. Maybe the Ford and the Packard types?

U.S. 240mm Howitzer

WW2. Widely used, but rarely photographed. This huge artillery piece used its own truck-mounted crane and was pulled by either the turret-less M10 or by the M6 High Speed Tractor. And, the gun was broken into two loads for transport. Now, that's a model!

U.S. "Mighty Mite"

Post-war miniature version of the Jeep.

U.S. M561 Gamma Goat

Modern and weirdo six wheeled cargo truck.

U.S. M76 Otter

Modern tracked amphibian. Used by the Marines in Vietnam.

Conversions, Updates & Accessories

British Churchill-early variants

WW2. Its seems a natural thing for the Tamiya kit.

German 15cm Gun conversion

WW2. How about this: a conversion set for the older DML Hummel kit? The carriage and the limber. While you're at it, do the same thing for the Nashorn. Actually, that would be easier, because there's no limber.

German Ballistics Measuring Vehicle

WW2. Based on the 8-rad armored car. For the Tamiya kit.

German update set for the sWS

WW2. It sure could use it.

German Steyr Fire Tender

WW2. Conversion for the Tamiya kit.

German Panzer II Interior and Engine set

WW2. For the Alan/DML kit.

German Panzer I Interior and Engine set

WW2. For the Italeri kit.

German Panzer IV L/48 or L/70 Interior set

WW2. For the DML kits.

German Panzer III E through H Update and Detail set

WW2. For any of the DML kits.

German Panzer IV G conversion

WW2. Not too difficult. For the Tamiya H or J kits.

German Mercedes-Benz 1500 A

WW2. Conversion for the Tamiya Steyr kit. Basically the same body work with front end differences. Command car, too!

German 38(t)

WW2. OK, there are already plastic kits of this. But how about a conversion for the new Tamiya Marder that turns it back into a 38(t)? The real-life conversion was fairly basic, so getting it back to a tank is just upper hull parts and a turret. This would be an opportunity to do the variants that have never been done in plastic. While you're at it, do a field piece conversion for the Russian gun at the same time!

German FAMO stuff

WW2. Tamiya appears to be done with its FAMO run, so what about the armored flak version (listed from Armoured Brigade, but never released) and the artillery version, the ~~Bileton crane version~~ and the version with the giant 0 ton cranes? The Nuts & Bolts booklet is the perfect starting point. CRANES AVAILABLE FROM BOTH CALIBRE 35 AND TIGER MODEL DESIGNS.

German Fox NBC Vehicle

Modern. Conversion for the Revell of Germany 6 x 6 armored car.

German Leopard 2A4 conversion

Modern. For the fabulous new Tamiya Leopard 2 A5. Real simple; just a turret and some other bits.

German Büffel ARV

Modern. Another conversion for the terrific Tamiya kit. Admittedly, a ton of work, but it's a real cool vehicle.

Soviet SCUD A

Post-war. Possibly based around one of the JS kits now in production.

Soviet Katyusha rocket launcher

WW2. For the Tamiya GMC 2.5 ton truck.

Soviet T-72 ARV

Modern. For the Tamiya kit. How about some other conversions for this great kit?

Soviet SU-76

WW2. The old Maquette/DML kit was a beast. We could use a very comprehensive update set for the the plastic kit. Or, a whole new kit in either plastic or resin.

U.S. M27 Bomb truck

WW2. Basically a GMC 353 with a dolly for bombs on the back. Conversion for the Tamiya kit.

U.S. M37 Motor Carriage

Korea. 105mm mounted on the Chaffee chassis. For Italeri.

U.S. M39 Utility Vehicle

WW2/Korea. Basically a turretless M18 with a slightly altered interior. Conversion for either the Academy or the AFV Club kit.

U.S. M35A3 Truck

Modern. The most modern version based around the AFV Club kit. Tires, body work and a few other doo-dads would do it.

U.S. Mk 48 Logistical Vehicle System

Modern Marine Corps and Army tractor version of the Oshkosh truck used as a trailer hauler. Might be possible to convert it from the Italeri kit.

U.S. M74 Recovery Vehicle

Post-war conversion of the M4A3E8. More modern version of the M32. Also used extensively by the Bundeswehr.

U.S. M3 half-track truck cab

WW2. With sheet steel cab and cargo bed. Used early in the war.

U.S. early Jeep conversions

WW2. Bantam or Ford GP. For the new Tamiya kit.

U.S. Chevrolet 1.5-ton Truck

WW2. Remember the Tamiya LRDG? That actually started out life as a cargo truck. If somebody copied the Italeri deuce and a half metal cab body and stuck in a nicely sculpted tarp for the back, they'd be in business.

U.S. GMC 352 conversion

WW2. Short wheel base version. For the Tamiya 2.5 ton truck. It's just a new, shortened bed and chassis with the spare tire holders.

U.S. GMC conversions

WW2. Cab over engine, van version, you name it, there were a billion things done to the WW2 GMC truck. Azimut did many of them for the older Italeri kit, but they're impossible to find in the U.S. and we now have the much newer Tamiya kit to work with. DUMP TRUCK CONVERSION AVAILABLE FROM RESICAST.

U.S. M26A1 Dragon Wagon Soft Cab conversion

WW2 & Post-war. Easy, really, when you think about it.

U.S. alternate pattern tires

WW2 & Post-war. There were several types. Check out pictures of the Dragon Wagon or Long Tom in combat.

U.S. M15A1/A2 Fruehauf trailer conversion

WW2 & Post-war. Stupid easy. Just two pieces of resin for the sides, the new ramps and a few other bits. Essential for attaching that extra trailer you might have to the M123 Mack tractor for a Vietnam scene or for use with the soft cab tractor.

U.S. Sherman comprehensive update set

WW2. Including everything like tail lights, tools, headlight guards, hatch details, etc. Partial sets are available, but nothing completely comprehensive.

U.S. Tank Engine Set

Similar to what Tamiya did for the German heavy tanks in plastic. Different radials for the Shermans, LVT's and Stuarts. The Ford G8, as well.

Soft Tops

More soft tops for all the cool new kits that are now available. We're talking about nicely sculpted resin replacements for the plain-Jane plastic parts. There are a few out there and some very expensive imports, but how about getting a line going? The Jeep, Dodge, FAMO, 8-ton, Kübel, Schwimmwagen and Steyr ~~2.5-ton~~ GMC all spring to mind. MANY NEW SOFT TOPS ARE ON THE WAY FROM TRAX—AND THEY'RE REALLY NICE, TOO.

A Czech Panzerjägerschnitzel

Or building a Czech Republic kit of the Marder III Ausf M Panzerjäger



When the Germans invaded Russia in 1941, they ran into a couple of very nasty surprises called the T-34 and KV tanks. To counter these new tanks, the Germans were forced to come up with a fast stopgap weapon until a more permanent solution could be found. One of these quick fixes was the Marder III, which went on to be one of the more successful Panzerjägers (tank hunters)

series. They simply took the obsolete Czechoslovakian Kampfpanser 38 tank chassis and mounted an antitank gun on it. Production began in 1942 and continued almost until the end of the war. There were primarily three versions built, including the Sd.Kfz. 139, Sd.Kfz. 138 Ausf. H and the Sd.Kfz. 138 Ausf. M. The Ausf. M, which is the subject of this review, was the last one produced.

The Sd.Kfz. 139 was the first and was equipped with the Russian 76.2mm Pak as a field expedient.

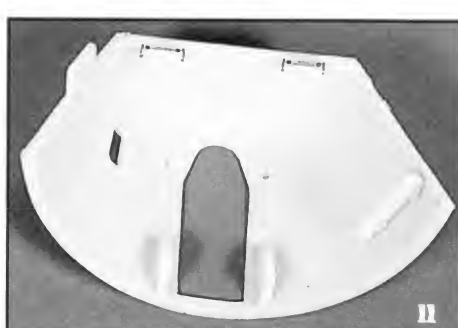
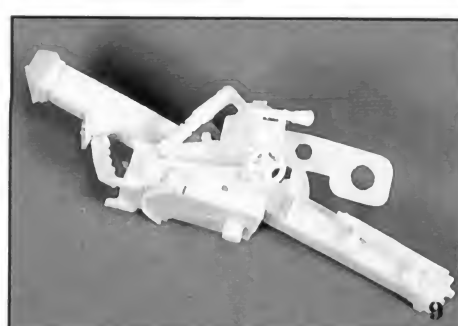
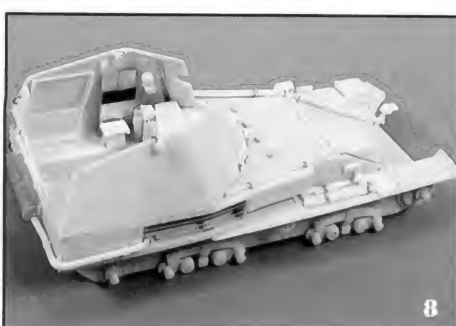
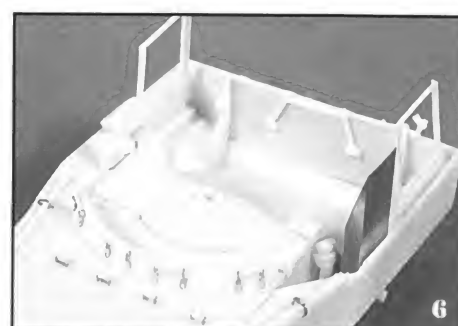
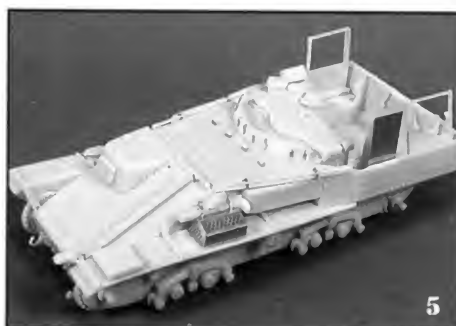
The Sd.Kfz.138 Ausf. H used the German 75mm Pak (40/3 L/46). The Sd.Kfz. Ausf. M also used the same gun, but the superstructure was moved to the rear of the vehicle and the engine to the middle. This gave the vehicle better balance and the crew more protection.

The prototype of the Marder III Ausf. M was produced in the first three months of 1943. After successful testing, it was immediately put into production until March 1944, when the Hetzer replaced it. At the end of 1943, a few changes were made in production, dropping the rivet method of assembly and switching to welding all plates. The most obvious difference was the driver's cupola was squared off, instead of rounded.

As mentioned, all the guns used the same chassis based on the Czechoslovakian built Kampfpanser 38 tank, with its very recognizable, large roadwheels. All the Panzerjägers were built



1. The hull is made up of a number of flat pieces. The fit is extremely good and almost no filling is required. 2. The rear fighting compartment is made of three basic pieces. Be careful of the rear piece, since it will mount equally well upside down. 3. The suspension mounts consist of a T-shaped piece and two roadwheel mounts that are supposed to be glued horizontal, as shown here.



4. This is an example of one of the wafer pieces used to cast the smaller parts. The film is very thin and the parts are easily removed. 5. The tools are now being added. The large brass ready round box should be left off until after the side panels are glued on. I had to remove it and then glue it again because it interfered with the placement of the left side. 6. These handholds or brackets required using some thin styrene rods, which were not furnished with the kit. Of course, stretched sprue or wire could be used. 7. The sides have a number of details, which need to be added before attaching to the chassis. The radio is very complete, but you have to add your own wire. I used thin soldering wire for the cables. 8. The sides are now glued on and the engine grill has been installed. The grill was a little tricky, but I cut off the two short sections on the lower piece and it then went in okay. 9. The basic gun mount assembly. The instructions are pretty easy to follow here. 10. The turned aluminum barrel was a nice touch and I also liked the brass band that goes around it. The muzzle brake was glued together and then filled. I painted it with primer to check for any seams. 11. The shield has two more of the handholds mounted on the top.

in the Bohemian-Moravian Machine Factory AG of the Praga Works in Prague. The final number of Marder III Ausf. M delivered was around 942. The Marder IIIs were usually assigned to infantry and panzer divisions, plus a few independent Panzerjäger units.

A new kit from the Czech Republic

Eagle CZ is a fairly new company and they produce a series of kits based on the Czech PzKpfw 38(t) chassis, plus a few miscellaneous conversion kits. This kit is really a little gem and very complete. I got the deluxe version, courtesy of the owner of Eagle CZ, for this review including: Friulmodellismo metal track, a turned aluminum barrel, decals, a photo-etch sheet and a CD ROM. The CD includes photos of the model under construction, painted, the parts labeled, reference photos of a real Marder III and last but not least, four painted silhouettes. I could not imagine a more complete kit. Now the really good news, the casting of the 179 resin parts is beautiful. There are only a few small air holes and no pour plugs. The smaller parts are cast in thin wafers but they are easily removed with your fingers. The 61 photo-etch parts are also cleanly cut. There are water slide decals for one version from an unidentified Marder III from the Eastern Front in Hungary, 1944.

Body beautiful

I started by assembling the body, which is built up of a number of flat pieces. The fit overall was excellent and almost no clean up was required. I glued the sides to the bottom piece. The rear bottom piece, R9, was then added. The front pieces, including R8 and the glacis plate, R7, were then glued on. I then glued in the bulkhead, R4, before adding R6, the top piece, which required a little trimming to get it in. I went ahead and glued in the floorboard, R5, and the rear, R10. Be careful about R10, it is easy to glue in upside down. I know. The two side boxes, R17 and 18, were then glued on along with the fenders, R12 and 13. The driver's cupola, R23, was cleaned up and glued on the front glacis plate.

I started the suspension next by gluing on the T-shape spring assemblies, R26, and the two road-wheel supports, R25. These took a little figuring out but they are supposed to be glued horizontal and flush with the springs. The roadwheels were then cleaned up, along with the idlers. The kit does not include the drive sprockets, because the Friul track set includes metal ones.

The Friul tracks were assembled by first cutting the wire into the appropriate lengths and then sliding the wire into the links. I have found this is much faster than trying to stick the wire into the holes of the links and cutting it off. Also it seems that these

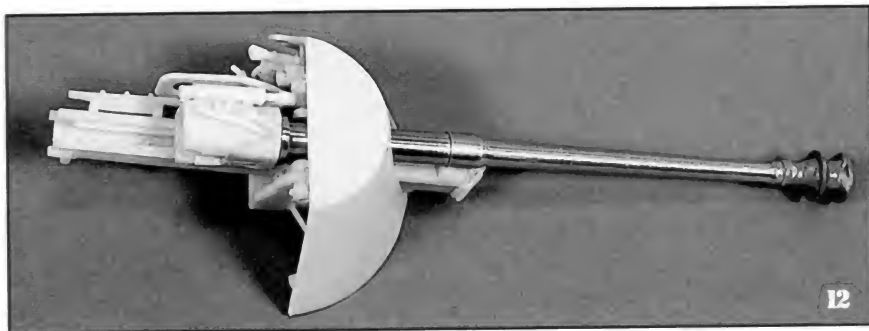
newer track sets are more completely drilled out than their earlier products. I was able to assemble both sets in about three hours. When finished, I laid the track aside, since I did not plan to put them on until after painting.

Detailing was then begun on the upper structure. Most of the pieces went on without any problem, except trying to figure out where they go. The brass grill on the right rear was glued on one piece at a time, starting with the top one. The bottom piece, P6B, was a problem, but I finally just cut off two of the last segments and glued it in.

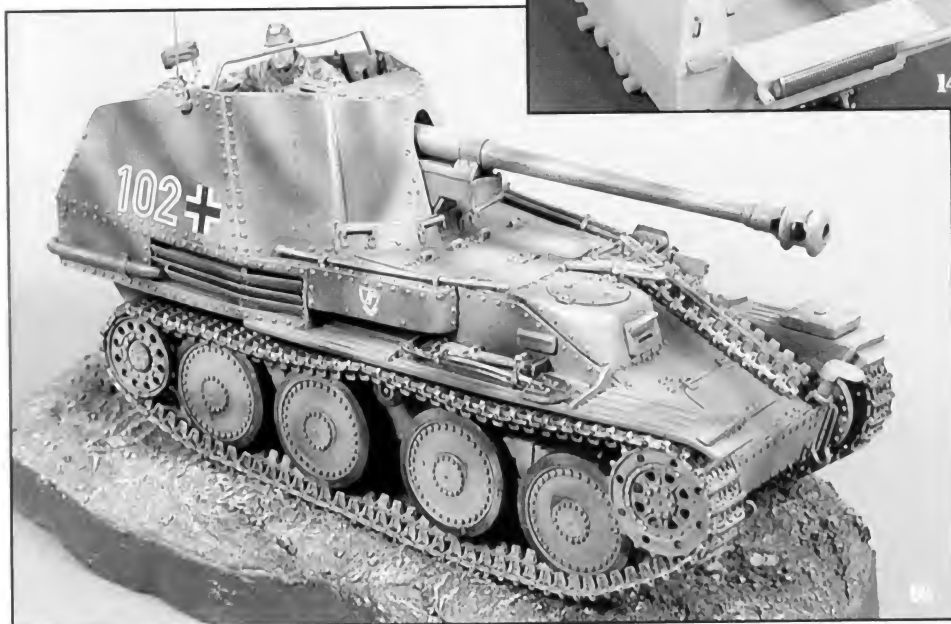
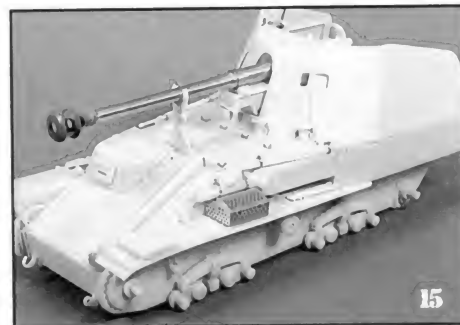
All the tools were added but the photo-etch brackets were a little disappointing. I could not really figure out how they were supposed to be used. All the brackets are labeled 10 A-D, in other words, four parts, but you only need two for each. The photos of the photo-etch parts were not very clear, but the brackets just looked different from what was supplied with the kit. I ended up using two parts for each bracket but their selection was arbitrary. The muffler was glued on and then the photo-etch screen that goes over it. There are some brackets for the front deck, for which only the photo-etch parts, P8 and P9, are furnished. I used very small diameter styrene rod to make the handles that go between the mounts.

Completing the business end

For the fighting compartment interior I studied the photographs and added all the pieces. I did find out when adding the hull sides, that the loose round box, P4, had to be removed, then reglued, since it would not allow the right hull side to sit right. My advice is to wait until you glue the hull sides on



12. When gluing the gun and mount on, be sure to get both of them into the shield opening first. They take a little maneuvering to get in. 13. The chassis is pretty much ready for painting. I temporarily mounted the gun to check for alignment. There was some adjusting necessary, especially with the sidepieces. 14. You can see the details of the fighting compartment here. Notice the ammunition is not glued in yet. 15. I actually decided later to turn the travel lock into the firing,



lowered, position. Getting the side shields to fit against the forward gun shield took a little work with a hair dryer. 16. All markings came from Archer's dry transfers and represent a Marder III from the 12th SS Panzer Division.

before adding this box. I did add soldering wire for the radio and its antenna lead and I used piano wire for the antenna. I left the rounds off until later.

The gun was pretty easy since the instructions actually have step-by-step assembly drawings for this. Watch out for part R83. The drawings use the same number for two different parts. They are actually mirror pieces, so if you are careful, you will not have any problem. The metal barrel was great and you get two choices for muzzle brakes. After the gun and mount were complete, I glued on the main shield, R24. To do this, be sure to get both the barrel and recoil assembly into the small opening first, since they need to be moved around to get in.

The two fighting compartment sides, R17 and R18, have a number of parts to be glued on, but the photos are very good at showing what goes where. After they are complete I then glued them on the hull. The kit photos show these pieces painted before mounting, but I would not advise this because some bending was necessary to get them right. I went ahead and glued them on, but left the gun and its mount off until after painting.

Painting the Jägerschnitzel

I left the rounds on their sprues for painting. They are attached at their base and since that is where they are glued onto the chassis, it made it

easy to remove and glue them on after painting was completed. After the usual wash in warm soapy water, I sprayed the gun with Tamiya XF-1 flat

black. This serves as both a primary and preshading coat. I don't believe in really putting a primer on a model except for very unusual situations, because it adds an unnecessary coat of paint on the model. I then lightly sprayed the vehicle with Tamiya XF-60 dark yellow. The camouflage pattern was sprayed on using Tamiya XF-61 dark green and XF-64 red brown. The rounds were painted using the same method as the vehicle. I then painted the shell casings Vallejo brass and the heads Vallejo natural steel. These acrylic metallic colors are great, since I use turpentine washes and they do not run like enamel paints do.

The roadwheels, which had been painted using a template mask, were then glued on and the drive sprocket and idlers were temporarily mounted. The tool handles were then painted using Vallejo light

The tracks were finished up by scrubbing them with a green kitchen scouring pad. The antenna was made from a piece of piano wire.



A) The Marder III Ausf. M is currently at the Ordnance Museum at Aberdeen Proving Grounds, Maryland. B) These handholds are one of the more difficult parts to reproduce on the kit. C) This is a good view of the engine grill, radio mast, and exhaust pipe. D, E) Here are the details of the vehicle rear, including the well-preserved muffler. F) The cast muzzle brake can be seen here.



below as a guide. The rank and insignia came from a Verlinden German uniform decal sheet. Unfortunately, neither the figure set nor the Eagle CZ kit include any loose rounds. I therefore used a Tamiya 75mm brass round I had left over from another set.

The base was made from Woodland Scenics 1/2 inch sheet styrofoam, which I cut with a hot wire. I mixed tile grout and Cellucay with Woodland Scenics earth tone undercoat, which is a special paint that is for mixing with plaster and works great. I

then sprinkled on some small gravel and then gave it a wash of burnt umber acrylic paints. Last I dry brushed with the same oils I used on the vehicle, except the sap green.

My conclusions

Overall, I would rate this kit very high. The quality of the resin casting is remarkable and I have built a lot of resin kits. I think one thing that really impressed me was there are several places where pins and holes are included for locating parts, just like grown-up plastic kits. The other thing I like about this kit is the completeness, with all the materials provided to build it. There are only two weak areas of the kit. The first are the instructions. The drawings for the gun are excellent, but there is not anything similar for the chassis. You are furnished with a number of photographs of the kit under construction with arrows pointing to the parts with numbers. This works pretty well and, compared to most resin kits I have built, this is a lot better than I am used to. The other area where there is a little room for improvement is the tool attachments. Other than that, the kit is very good. I think the price is also quite reasonable considering you are getting all the usual aftermarket stuff included, like the photo-etch, metal barrel and tracks. ~~☒~~

—Tanner Namoitka

tan and then Vallejo wood stain. The metal items were painted black then later dry brushed with Rub'n'Buff silver.

Although there is a nice set of decals with the kit, I found another paint scheme I liked better. This belonged to an SS unit, the 12th SS Panzer Division "Hitlerjugend" in France in 1944. I therefore purchased three sets of decals from Archer to reproduce this particular vehicle. These included; Waffen SS Panzer/Panzer Grenadier division markings, balkenkreuz insignias, and red and white turret numbers. These dry transfers went on without any preparation, which is what I love about them. I then sprayed everything with Polly Scale clear flat to seal the decals and paint.

The tracks were first soaked in Blacken-it and then given a wash of black/burnt umber oil paint. Once dry, I lightly scrubbed them with a kitchen green scouring pad to bring out the metal again. This included the spare tracks that go on the forward glacis plate, which I had left off until after painting was complete.

The whole vehicle was then given a wash of very thin black oil paint. I lightly dry brushed with titanium white, sap green, and yellow ochre oil paints. I sprayed the lower part of the chassis with Tamiya XF-52 flat earth before putting the tracks on. I found this spray really dulls the track so I put the track on after this step. I did have trouble getting the track over the return roller. It would have been better to wait to attach it after the tracks were on.

Putting it to work

As I mentioned, I wanted this vehicle to represent one from the 12th SS Panzer Division on the western front, so I bought the Warriors Marder III crew of two SS soldiers. I assembled them from the box, but one figure is just too relaxed compared to the other. He is just hanging out smoking a cigarette while the other figure is busily trying to load the gun. I decided that if I removed the cigarette and reoriented the first figure, I could make him look like he was more involved in what is going on. Both figures were first sprayed with Tamiya XF-15 flesh for a base. I then painted their hands and faces with oils. For their camouflage tunics, I decided on a fall/winter top, so I painted them with Vallejo browns, using the SS Uniform book referenced

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Eagle CZ 7.5cm Pak40 auf PzKpfw.38(t) M "Marder III" V35K1034H. Suggested retail price \$120.00. Kit graciously provided by the manufacturer.

Friulmodellismo Panzer 38(t), ATL-13 included in the deluxe version of the kit.

Warriors Marder III Crew. Kit number 35406. Retail price \$23.98

References

Scheibert, Horst. *Marder III*, Schiffer Military History, Atglen, PA 1998. ISBN: 0-7643-0394-5
Francev, Vladimir, and Kliment, Charles. *Marder III a Grille*, MBI, Praha, Czech Republic, 1999, ISBN: 80-902238-5-0.

Borawski, Zbigniew. *Marder III*, Wydawnictwo "Militaria" Number 73, Warsaw, Poland, 1998 ISBN: 83-7219-025-9.

Steven, Andrew. & Amodio, Peter. *Waffen-SS Uniforms in Colour Photographs*, Europa Militaria No 6, Windrow and Greene Publishing, Hong Kong 1992 ISBN: 1-872004-61-X.

A new turret and spot of paint is all you need



The T-72 can trace its roots back to the development of the prototypes for the T-64 project. The two competing Soviet design bureaus were the Morozov Bureau at Kharkov and the newer Uralvagon Bureau at Nizhni Tagil. The favorite with the Military Industrial Commission was the Uralvagon submission because of its lower cost and simpler design. The Army however, wanted the "High Tech Tank," so the Morozov design called Obiekt 434 won the competition and went on to be produced as the T-64 with the 115mm main gun. Because of controversy over the competition, Uralvagon Bureau was permitted to continue development.

The timely arrival of an M60A1 with its 105mm gun in the early 60's, compliments of a defecting Iranian army officer, caused the Soviets to first rethink, then rearm the T-64 with a 125mm weapon. Although they had lost the competition, the Uralvagon Factory had been made to produce the

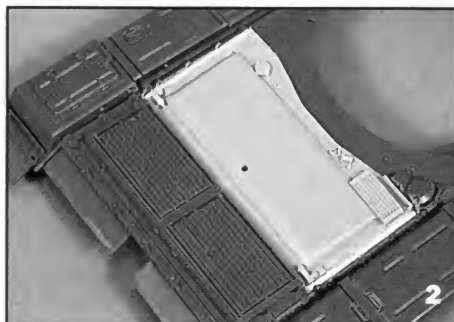
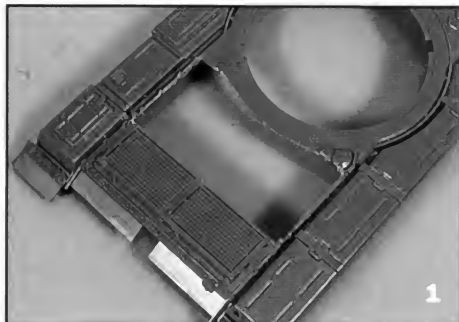
T-64 since 1965. One advantage of this was that the Uralvagon Bureau was familiar with the problems that the tank was having, including its high cost and mechanical problems. So, those smart guys at the Uralvagon design bureau basically took the T-64 and made a cheaper and simplified version called the Obiekt 172, which was to become the T-72. Initial production of the T-72 began in 1972 and the first prototypes produced were tested by the Army. The rest is history; the T-72 went on to be produced in five countries and is one of the most widely used MBTs in the world. Of course, today it is being replaced with the newer generation of tanks, but it is still a common tank found in a lot of inventories. The U.S. Army and some other countries, like Israel, have also found the T-72 to make an excellent exploding target tank since it tends to flip its turret when hit.

The T-72 main gun is the 2A46 125mm gun with an auto-loader system, which reportedly will also

try to auto-load any poor tanker who gets too close. One of the other penalties of having an auto-loader is it leaves the ammunition exposed, so that any hit below the turret can ignite the rounds. The result is often an instant convertible. The power plant is a V-12 cylinder, multi-fuel engine and it has a crew of 3. The model in this article is based on a former East German Army T-72M1, which is currently the property of Alan Cors who owns the Virginia Museum of Military Vehicles.

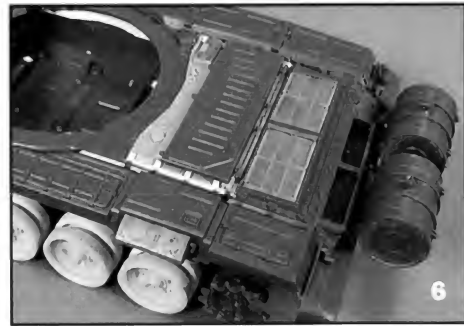
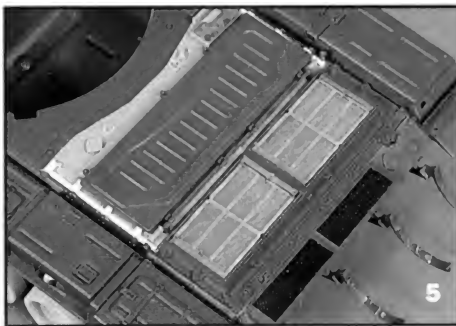
Tamiya and a host of others

The Tamiya kit of the T-72M1 is excellent and is cast in dark green plastic. There is also a small photo-etch set of screens, plastic screen material, plus a bit of string for a tow cable and hoses for the fuel tanks. The only serious problem with the kit is the turret. It is seriously flawed in shape and needs replacement. In my opinion, a Finnish Company called JS-Models produces the best turret available



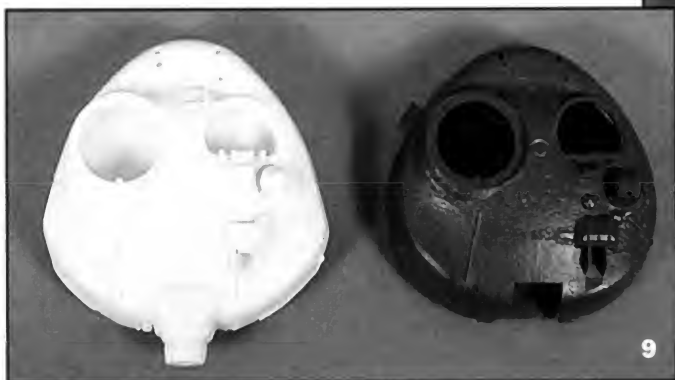
1. To add the Verlinden engine, the engine hatch had to be removed by first drilling large holes around the hatch then cutting between the holes with plastic cutters. 2. Unfortunately, the Verlinden resin replacement hatch is

too narrow. A thin strip of styrene was glued to both ends to fill the gaps. 3. The Verlinden engine ready for mounting. The wires are Hudson & Allen's thin soldering wire.



4. The engine was glued in, but spacers were added to lower it some. Otherwise, the engine hatch will not close. 5. The engine grills come from the kit, along with the fuel tank supports. The mounting points on the supports were cut off, but this was unnecessary. They should have been left on, unless you are not going to use the kit fuel tanks. 6. The fuel tanks were cleaned up and glued on, but the connecting hoses were left off until after painting. 7. The majority of the parts on the glacial plate were from the kit. There are a number of photo-etch parts available, but they just were not improvements over the kit parts. 8. These six-spoke Chesapeake Model Designs replacement roadwheels are very easy to assemble. They do use the rubber insert from the kit. 9. This is a good comparison of the JS Models and Tamiya turrets. You can see why the Tamiya

turret needs to be replaced. 10. The beautiful thing about the JS-Models turret is that all the kit parts fit without any modifications. The only thing that had to be done was to drill out a hole for the main gun tube. 11. The new Eduard turned aluminum gun tube comes with a nice little photo-etch set for the bands. 12. Here, all the bands have been glued on with thin brass wire connecting the pieces.



for the T-72M1. I ordered mine directly from Finland and had it in a few weeks. They also sell a special turret box, if you are building the Finnish version. The roadwheels that come with the Tamiya kit are the early version of eight-spoke type. If you want to upgrade these to the more common, later six-spoke version, Chesapeake Model Designs has an outstanding set, which Bill Miley kindly furnished me for this review. Additionally, I used a scraper blade set also from Bill. The ModelKasten workable tracks were used in this construction, along with the new Eduard T-72 barrel. A Verlinden update set and photo-etch sets from MB Models, Eduard and Airwaves were thrown in for good measure, but most of the photo-etch sets are really not necessary, since the kit itself is really very good. The last item I added was the PanzerShop's driver's and commander's windshield set.

Hull Work

I started with the hull, since I had decided to

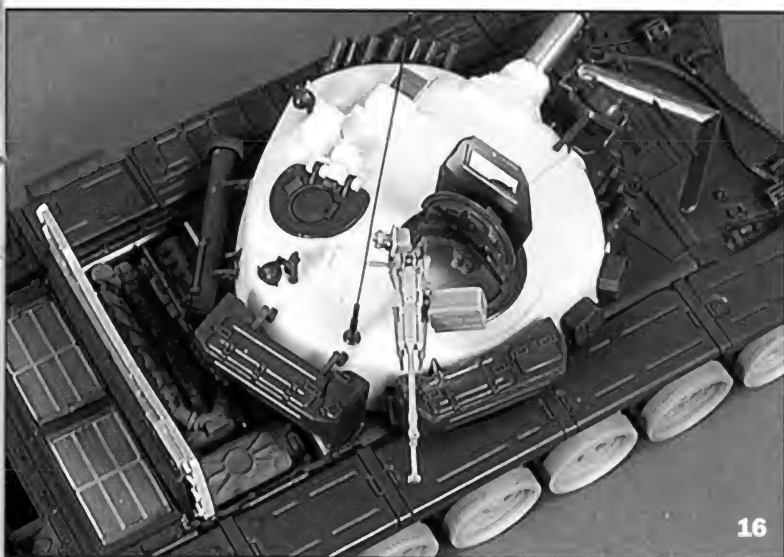
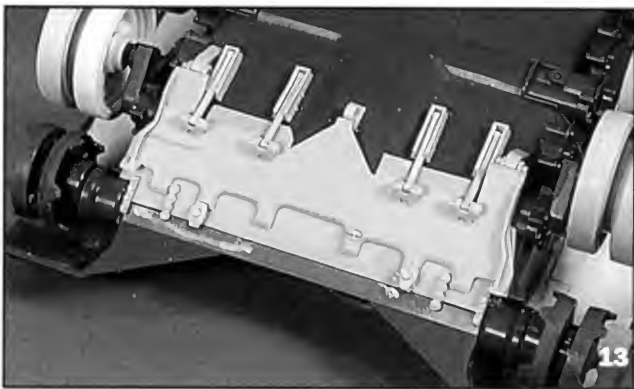
include the Verlinden engine. The rear deck was cut out for the engine. Verlinden has a replacement engine hatch, but unfortunately, it is too narrow. To correct for this, I added two shims made out of sheet styrene on the hatch sides to make up the difference. The engine was then assembled and wiring was added using thin soldering wire. The engine is supposed to mount flush underneath the engine deck, but it sits too high so more shims were also added here to allow it to sit lower. If you don't add the shims or spacers, the engine hatch will not close. The engine was then glued in and the rear photo-etch screens were added, along with the

Eduard photo-etch supporting strips on the screens.

The rear parts were now glued on. I glued on the unditching log using the kit mounts, but also used the straps that come with the Eduard photo-etch set. The kit fuel drum supports were added and the barrels were glued together and cleaned up. I replaced the threaded screw that goes on the back of the tanks with thin brass wire. The fuel tanks were then glued on. I left the connecting hoses off till after painting.

There are a lot of photo-etch options available for the front deck, but I have built this kit using them and was not thrilled with any of them. Again, for a lot of these parts the kit is actually better, so I mostly just used them instead of the photo-etch pieces. I did drill out the IR light on the left side to receive an MV lens later.

I replaced the front spade with the Chesapeake set. First, you have to remove the molded on mounts



13. The Chesapeake Model Designs replacement spade assembly was easy to install. The four support arms and pockets were the last thing glued on after the blade was in place. 14. The Panzer Shop commander's windshield was a nice little extra. The set also includes the driver's windshield, but I chose not to use it. 15. The Verlinden DhSk AA machine gun is a complete kit in itself. It has both resin and photo-etch parts, but is no longer produced. 16. The tank is almost ready for painting. The engine deck is raised, but not glued, since it will be removed for painting.

the kit comes with eight-spoke roadwheels, which were on the first T-72s but were later replaced with six-spoke wheels that were lighter and stronger. The Chesapeake wheels are all made of resin, but you still need the rubber sleeves that come with the Tamiya kit. After they were glued together, they were sanded to remove the ridges off the roadwheels.

The ModelKasten workable tracks were then assembled. They furnish spacers that need to go into the driver sprockets to make them wide enough for their track. I finished both runs and set them aside for painting. The more I use ModelKasten tracks, the less I like them. They look great but the pins they furnish are just not long enough. This was certainly the case here and the track was constantly falling apart.

New turret

The JS-Models turret is a breeze, since it fits right into the turret ring of the kit without any modifications. The casting is beautiful with no flaws, except for a few bubbles of resin on the bot-

tom ring, which can be easily removed. The Tamiya parts, like the turret hatch ring, fit right in. I added all the details again, mostly from the Tamiya kit, although there were a lot of photo-etch options. Again, they were not improvements to the original Tamiya parts. I did add the extra searchlight next to the commander's hatch, although the instructions say it is only for the Russian version. The former DDR T-72M1 that I was using as my guide has one on it. A hole was drilled in the front of the turret for the Eduard gun barrel. Since I was not interested in having the storage boxes open, I did not use the Verlinden replacement parts for them. Next, I drilled a hole in the coaxial machine gun mount and glued in a very small hollow brass tube to simulate the gun barrel. The main co-axially mounted searchlight was mounted, again using Tamiya parts. I did add the main power cord that runs from it to the turret, using medium soldering wire. The smoke grenades were then glued on, along with the gunner's hatch, which was glued closed. I also left the commander's hatch open.

The Eduard barrel turned out to be harder than first anticipated. The problem is super glue does not hold the photo-etch parts on the aluminum barrel very well and the parts are too small to solder. I did finally get all the bands on though and glued the barrel into the turret.

I then built the DhSk "Dushka" AA machine gun.

I used a great, but unfortunately out of production, Verlinden kit to build it. Actually, the kit machine gun is not that bad. Anyway, the Verlinden one is a combination of resin and photo-etch parts. Once completed, I glued it to the commander's hatch ring. The last thing that was added was the commander's windshield. This was from a new kit made by PanzerShop in the Czech Republic. The set includes two windshields. One for the driver and one for the commander. The kit includes the photo-etch pieces, plus clear acetate and wire. I decided not to use the driver's, since it requires the turret to be turned to be in place. For

underneath the front. The assembly looked pretty difficult at first, but by following the instructions, it turned out to be very easy. I first glued on the forward piece against the hull. The mounts on the spade were glued to the spade next, then the spade was glued to the bottom of the chassis. Last, I glued on the four rods and their pockets to the hull. By doing it this way I did not have to worry about trying to get everything to line up before the blade was glued on.

Suspension stuff

The Chesapeake Models replacement roadwheels were assembled next. As mentioned earlier,

The figure is from Verlinden and the decals for the DDR are from the kit. The base was a simple affair, consisting of just a wooden plaque covered with a paper material from Tamiya representing stone paving.



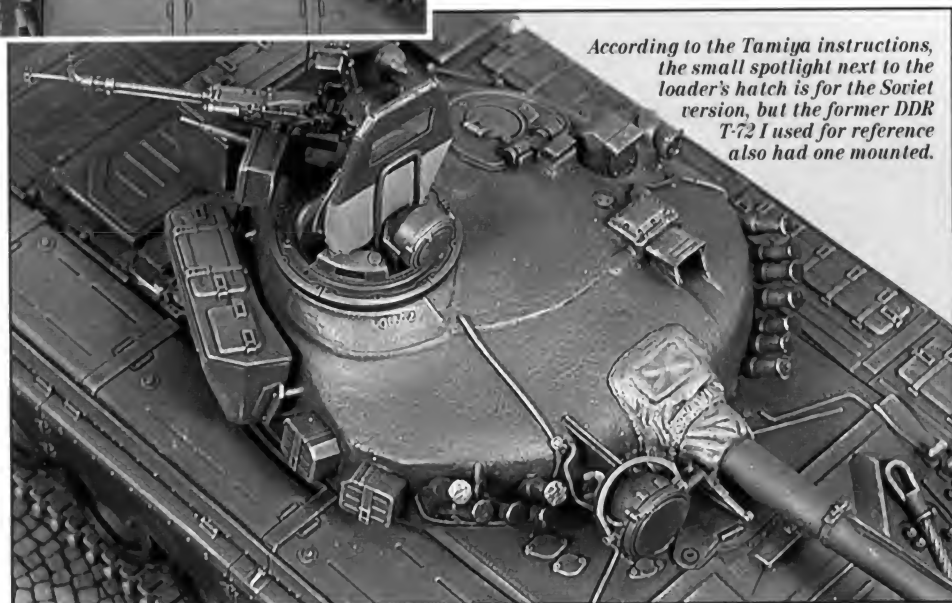
the commander's windshield, I left off the last piece on the rear so I could put the acetate on after painting.

Finishing Up

According to Steve Zaloga, the East Germans used a medium green for their tanks, unlike the darker green the Soviets used. Indeed, the T-72 at Alan Cors has this color, although somewhat faded. To get this color, I chose Tamiya XF-5 flat green and mixed in about 10% XF-62 olive drab. I first washed the tank in warm soapy water. I painted the



Left; The engine compartment was first sprayed white, then all the engine parts were painted with Vallejo paints using reference photos of real engines for a guide.



According to the Tamiya instructions, the small spotlight next to the loader's hatch is for the Soviet version, but the former DDR T-72 I used for reference also had one mounted.

engine compartment and inside the commander's hatch with Tamiya XF-2 flat white. Masking off those two areas, I then sprayed the tank with Tamiya XF-1 flat black. I lightly sprayed the tank with medium green and the roadwheels using a wheel mask. The tracks were sprayed with Polly Scale panzer red brown. I painted the engine with a variety of colors based on reference photographs of real ones. The side skirt sides were painted with Tamiya flat black and the mantlet with Vallejo dark green; the canvas that hangs from the commander's shield with Vallejo khaki. I applied two DDR emblems on the turret from the kit's decal sheet.

I wanted to have a fairly clean and new looking T-72, so for weathering I only applied a wash of very thin black oil paint. The tracks were given a wash of black/burnt umber oil paint. When dry, I put the tracks on and glued the side skirts on. The clear acetate for the windshield was added and the photo-etch piece that holds it in was glued on top. The tubing for the fuel tanks was cut and glued on using the kit's instructions. I very lightly dry

A red MV lens was glued into the light that is facing backwards. The exhaust deflector was painted with rust paint then dry brushed with Rub n' Buff silver.

brushed the tank with a mixture of titanium white, sap green and burnt umber oil paints. The tracks, machine gun and tow cables were dry brushed with Rub n' Buff silver. I added MV IR lenses to the small searchlight on the turret and the headlight on the front. I put in a red MV lens in the marker light on the rear of the turret.

For the figure, I chose a Verlinden Russian tank officer. I am not aware of any DDR tanker figures. Anyway, as far as I know, they used the same uniforms or at least very similar uniforms to the Russians.

He was painted with oils and Vallejo paints. The base is a simple wooden plaque, which was stained. The brickwork is from a Tamiya diorama paved stone product, which is a paper sheet that was glued to the base.

Results

This kit of the T-72 is definitely one of the more fun kits to build and is certainly up to Tamiya normal standards. With the exception of the turret, it really is an excellent kit. I was very happy with the ease of using the JS Models turret and how well it fit onto the hull without any cutting. This is a little unusual with normal resin replacement parts. The commander's windshield set was great and very easy to build. The ModelKasten tracks look great, but I think I prefer the Friulmodel ones, since they do not fall apart. As far as photo-etch sets go, I had (I think I had) all that are made and ended up only using a few parts. Unless you really want to use them, save your money. I really cannot recommend any of them, but I did see that Eduard just came out with a new set and I have not seen it to comment. The Verlinden set was only useful if you wanted the engine and to open the turret storage boxes, otherwise it is not required. ☒

—Jim Hensley

MMiR RECCE

Tamiya Russian Army Tank T-72M1. Kit number 35160. Suggested retail price \$36.00

ModelKasten T-72 workable tracks. Kit number SK-011. Suggested retail price \$39.95

JS-Models T-72M1 Finnish Turret. Kit number JS-12. Suggested retail price \$20.00. The only source I know of is Tim KUIVALAINEN Hobby Store in Finland, Aleksis Kiven Katu 58, 00510 Helsinki 51, Finland. <http://www.kolumbus.fi/martti.kuivalainen/> but his service is great.

Verlinden T-72M1 Update Set. Kit number 781. Suggested retail price \$29.95

Verlinden Soviet DShK DUSHKA AA MG. Kit number 706. Currently listed as out of production.

Chesapeake Model Designs T-72 Six-spoke Roadwheels and Scraper Blade. Kit number CMD 14B. Kit graciously provided by the manufacturer. Suggested retail price \$14.00.

PanzerShop T-72 Driver's and Commander's Windshield set. Kit number PS35A312. Suggested retail price \$5.20.

Eduard T-72M1 photo-etch set. Kit number 35-051. Kit graciously provided by the manufacturer. Suggested retail price \$19.99.

Eduard T-72M Barrel. Kit number 34-002. Kit graciously provided by the manufacturer. Suggested retail price \$11.95.

References

Russian Army T-72 Main Battle Tank, Tamiya News #12, Tamiya Plastic Company, Shizuoka-City, Japan. A great source of photos, but all the text is in Japanese.

Zaloga, Steve & Sarson, Peter. *T-72 Main Battle Tank 1974-1993, New Vanguard #6*, Great Britain 1993, ISBN 185532 338 9. The best single source on the T-72 and its history.

Per-schwing!



Tamiya provides its own interpretation of the WW2 classic

Hey, did you hear? Tamiya did a Pershing. It's sort of an odd choice, if you ask me, but due to my love of all things Tamiya, I'm still very excited. The thing that is significant is that Tamiya has put its very own spin on this kit and in the process, kicked a little ass.

Although the Pershing was the later comer on the scene of the Second World War, it still marked a radical change in the design of American combat tanks. I won't continue to bore you with the traditional "blah-blah" on the history of the Pershing, but I will mention it occasionally during my description of the model. Let's get started, shall we?

The Pershing comes packaged in a small sized box, with the now legendary Tamiya artwork bursting off of the box top. This is not the same artwork that adorns the 1/16th scale Pershing (not that it matters). The entire kit is molded in dark OD plastic and the tracks are the band type. For this release, Tamiya has gone over to the booklet style instruction. This gives you a brief history and a few drawings, the actual building instructions and the paint schemes, all in one document.

The place to start on this model is the suspension. This is what sets it apart from the previous DML kits. You see, it works. Not the "run it around on the floor" kinda works. This is the "positioning in a cool way in a diorama" kinda works. I guess maybe saying it works is an overstatement. It might be better to say that it's adjustable. I thought this was a

very cool idea. Making static model suspensions work for display purposes is an idea that has been growing steadily in Tamiya's home market of Japan. I have noticed it gradually creeping into Japanese modeling magazines for the last several years. Well, Tamiya has gone and done the advance work for you. You just have to be a little careful how you use it. More on this topic later.

In addition to the suspension, Tamiya has also provided two points on the lower hull to insert long screws to hold the model tight to its base. Nut-shaped recesses, nuts and 30mm screws are all provided. Cool, huh? I am reminded of Shep Paine's old diorama sheets that were contained in Monogram armor kits of the seventies. Specifically, I recall the one that accompanied the Patton kit. Shep (if I can call him that) had meticulously cut the suspension of the tank ("The Love Bug") to articulate it over its base. It was quite a convincing effect.

To get to these parts, I first added all of the various shock absorbers and bumper stops to each side of the lower hull. Of course, the lower hull is fully detailed everywhere and the first of many tasty looking cast parts can be seen on the front.

Only the first and last roadwheel stations are actually sprung. A small, flat spring is screwed into the inside of the hull and a notch on the torsion arm engages it. Later, small plates get installed over the spring to keep them from popping out. All of the torsion arms fit snugly into poly caps located inside the hull. The idea is to let the front and rear arms

"ride" your base and then you move the center four wheels up or down to meet the terrain. The finishing touch is the bolt, which keeps everything in place.

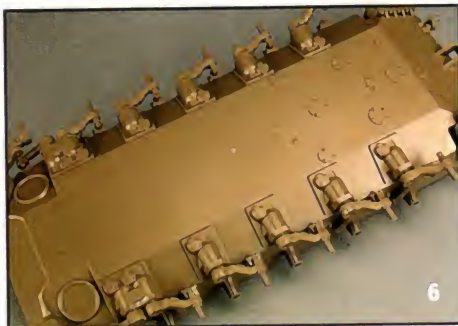
On the Pershing, the front idler is connected to the last torsion arm via a swing bar. To allow it to remain workable, Tamiya has you attach the two with a screw. This is very ugly and it is somewhat visible on the finished model. There are also pins on each arm base that you can use to fix the suspension in place like a regular old-fashioned model. I was so excited about this workable aspect of the suspension that I overlooked these pins. Not good. This caused some problems later, so decide now how the model will be displayed.

The final drives are a wealth of detail and each contains the prominent lower brace.

There are a few pieces to add to the rear hull, such as the exhaust outlet, tow hooks and the towing pintle. I found that it was easier to leave off the tow pintle until after adding the tow cable.

The roadwheels themselves are pretty straightforward. Basic, good Tamiya stuff. I sprayed all of the wheels' interior faces black before assembling them. This is so much easier than doing it later. I did the same thing with the return rollers. The drive sprocket is the very early type. The distinctive guide for the center horns is rendered in two separate parts. All of the suspension components were left off the model for painting.

The upper hull part is extremely well detailed and well thought out, as well. The level of engraved



1. Here are the components that make up the drive sprocket. Note the center guide plates. These were also present on the Sherman version of this sprocket. 2. Roadwheel, front and back. 3. Believe it or not, this is just three pieces of plastic. I'm sold! 4. The interior of the driver's hatch. 5. These are the many separate engine deck access doors. Can you say "diorama

possibilities?" 6. As you'd expect, the bottom hull is festooned with detail. 7. The cast detail of the lower front hull is evident here. 8. The forward idler assembly. If you look closely, the screw head is still visible when the road wheels are installed. 9. The rear final drive housing.

detail is quite high, but Tamiya chose well which parts to mold separately. For instance, rather than mold the forward hatch arms right to the upper hull (and not have any kind of undercut), they are provided as drop in parts. Just make sure the teeny bolt detail is facing away from the hatch.

All of the engine hatches are separate parts, too. This is quite a sight as there are eight different pieces to add. This is also (to me, anyway) a clear nod toward the aftermarket crowd. "Last one to do an engine is a Marmon Herrington Light Tank!" Or, if you wish, you could take a crack at it yourself.

Leaving off all of the grates until after attaching the upper lower hull is very helpful in obtaining the proper alignment of the rear hull.

The face of the hull .30 MG port is also a separate part and this should be carefully filled so that it appears like the solid cast part that it is. The headlights are very accurate and, like the earlier Leopard release, the lights are empty and are designed to receive a solid plastic lens part, which you can color yourself. This also means that they are ready to receive MV lenses if you have them handy—MV116 fits perfectly.

The stowage box system located along the tops of the fenders is composed of 15 different parts, which include all of the braces, panels and the boxes themselves.

Tamiya provides very delicately molded guards

for the headlights and the siren. While these were still attached to their sprues, I carefully thinned them out with a sharp X-Acto blade. This made for a very realistic effect, without all the fuss of photo-etch.

The periscope guards are also provided in styrene, which is nice because they are a bear to scratch build. They are also a bit on the thick side, but are certainly an admirable addition to the model. They do have some flash along the longer edges, so a bit of scraping with a knife blade will thin them down a little.

The rear mounted tow cable is molded in one piece with separate cable heads. I thought about replacing it with wire or cord, but it was so nice I just went with it. Once it was installed, I added the towing pintle.

Tamiya provides an infantry intercom box, but if you are going for a very early WW2 scheme, you should know that the first tanks to see service in Europe did not have this. It may have been installed later, but most photos do not show it. Nearly every photo I've seen of the Pershing in Korea did have it.

To leave off the com box, there is a little clean up in the area that receives it. There's a hole and a small wedge on that corner of the hull.

Also dating the kit is the early style gun travel clamp. This style lock is attached directly to the rear exhaust port. Later clamps were mounted directly to the rear deck.

The instructions call for adding the side skirts and the tracks at this stage. I left these off for painting. By the way, the side skirts fit so well that they can be painted and weathered off the model.

Take the turret and run

The turret is basically two halves that mimic the real castings almost exactly like the real thing. When closing this up, don't be too thorough in eradicating the seam. The real turret castings were joined at this point and the joint is very obvious on the real tank. Care should also be exercised not to eradicate the great cast texture seen all over the surface of the turret.

The gun and its mount are very robust and can be added after the turret halves are together. The shell ejector point is a separate part and this could use a little filling at its base to help it blend in to the turret.

The external fittings for the turret are superb. The spare track racks, the track adjusting devices and the rear mounted MG rack are all crisply molded right to scale. The stowage rack for the .50 cal seen on the back of the turret is the same one we recently saw in the newly reissued M4A3 Sherman kits. Also included is a roof mounted travel clamp for the .50 that's up there.

Both the antenna mounts are included in the kit. The larger of the two has that annoying notch in the top, which I promptly filled with a wedge of



10. The bottom of the final drive features this elaborate bracket, which is spot-on accurate. 11. This is one of four internal springs that allows the manipulation of the roadwheels. 12. The center four roadwheels utilize these poly caps and must be pressed into position. 13. Two points are provided inside the hull to pull the model into your diorama terrain. 14. This notch is

to accommodate the infantry telephone on the rear hull. 15. Look at those wide-open spaces! 16. The front mantlet is aggressively textured-as it should be. 17. These are the delicately molded periscope guards. 18. I thinned out the front light guard with a file and a x-acto. The stock version is on the left.

styrene. Both mounts were eventually drilled out to receive wire for the antennae.

Early Pershings (to around serial 550) had provision for a turret mounted crane. This was used to remove portions of the engine deck and the engine for maintenance. This was very similar to the German "Pilz" crane, except that it used two large hinged lugs on the left side of the turret. These lugs were the mounting point for a tripod crane and the third part of the crane was a stabilizer bar that fastened to the right side of the turret. The lugs on the left side are provided in the kit, but the lugs should be drilled out. I have also seen pictures of a hinge pin inserted into the lug. There is a spot for the third connection on the top edge of the turret, but not the connection. Tracking down a good photo of this was very tough. The third connection is actually a small loop and the stabilizer bar is simply hooked onto it. This was made from brass wire.

The casting numbers seen on the turret roof are present and delicately rendered, but the numbers seen on the mantlet are missing. You could actually go to town on this kit with casting numbers. Most of the Pershing's major armored components were cast and the tank is covered in these teeny numbers. I guess Tamiya figured they had to draw the line somewhere.

The standard Tamiya .50 cal tops off the turret.

Pleased to paint the Pershing

I proceed to paint when I had the following big plastic parts; the hull, the turret, the roadwheel, the tracks and the side skirts. As I mentioned, the fit of the side skirts was so precise that I was able to completely paint and weather them off the model. Only minor touch-up was required.

I primed the model with black, then went at it with good 'ol Tamiya Olive Drab, XF-62 (it seemed only proper). This was highlighted by adding small amounts of dark yellow. The roadwheels were all painted with a template and the tracks were sprayed with Tamiya Metallic Gray.

Tamiya's decal sheet is very comprehensive and includes four different schemes. One of these is real different, as it depicts a tank of the 8th AD in Czechoslovakia. This would be a real late war scheme, as the 8th was still moving on objectives on VE day!

Two Zebra Mission (the first Pershings sent to Europe) schemes are provided, including "Fireball," which had the dubious distinction of being the very first Pershing to be knocked out. A Marine Corps scheme rounds out the selections.

I have been looking for an excuse to use several Archer sets for the Pershing for some time. They offer transportation markings for the M26, as well as basic stars and registration numbers.

I went with "another" tank from the 3rd Armored Division's 33rd Armored Regiment. I know from Hunnicutt that D Company of the 33rd also received Pershings, so I went with that.

The registration numbers on the front and rear of the hull are typical of the early vehicles. Most close-up photos show these numbers in a slightly darker color. My guess is that this is yellow. I used the Archer numbers in white, but gave them several light coats of Tamiya Clear Yellow.

The tank was then weathered with light oversprays of Tamiya Buff. When this was thoroughly dry, the tank was given an oil wash. This is where things started to go slightly awry. You see an oil wash will slightly weaken thin styrene parts. Although this effect is very subtle, it was more than sufficient to completely corrupt the sit of the suspension, which I was silly enough to leave unglued. The truly sucky part about this is that it's not real evident until you add the tracks and skirts.

I also weathered the model with Hudson & Allen mud suspended in Tamiya thinner. In this instance, I began the process by spraying straight thinner on the hull, and then dabbing with a brush loaded with the mixture. A thin coat is also added to the tracks. This dries with a very cool effect, but it does not tolerate a lot of handling. Some more handling was required to fix my suspension gaff and



19. The rear end showing the exhaust and Tamiya's neat tow cable solution. 20. The turret is very accurate in shape and size. It's not mentioned in the text, but the .50 cal ammo stencil is from Scale Model Accessories. 21. All of the markings on the model are from Archer Dry Transfers. For some reason, early Pershing registration numbers were yellow. 22. A view past that sexy engine deck to the left side of the turret. The track adjustment tool had to be removed in order to install the side turret star. 23. The end result of the thinned light guards and my MV Lenses. 24. These useful parts are also included in both of Tamiya's new and revamped Sherman kits.



the moral to this story is unless you plan to use it, glue that suspension!

I also found the tracks to be somewhat loose, but I believe this is also attributable to the suspension not being glued.

The last thing I added was the aforementioned MV lenses. Several nice accessory items are included in the kit, such as .30 and .50 cal ammo boxes, along with K-ration boxes and a .30 cal tripod. For clarity, I left off any external gear.

And so...


OK, that's Tamiya's version of the Pershing. I like the kit a whole lot. The suspension problems were my fault entirely. If I had glued the torsion bar arms early on, this would have been a problem free kit. The level of detail and the execution of the parts are as good as we have come to expect from these guys and it's good to know that they are maintaining the standard. I thought the "adjustable" nature of the suspension was a very novel and creative idea.

Comparisons to the DML kits are inevitable. The Dragon kits are quite good, but are missing a few

items, such as the brackets underneath the final drive and the detachable engine panels. To their credit, the DML kits do include the front and rear fender supports, which are missing in the Tamiya kit (although they are not seen on early vehicles).

Dimensionally, the two kits are nearly identical, with the exception of the turret. The DML turret is much wider across the top.

The Tamiya model is expensive, at forty-four

bucks, no doubt as a result of the declining dollar. The overall construction time was actually pretty short. I took a little extra time in thinning out the light guards, but overall I'd say this kit could be built out of the box in as little as three nights. I'm looking forward to building another one and I'd like to take a crack at the 105mm M45 version or even that Super Pershing. 

—Pat Stansell

MMiR RECCE

Tamiya U.S. Medium Tank M26 Pershing (T26E3). Kit number 35254. Kit graciously provided by the manufacturer. Suggested retail price \$44.00.

References

Pershing A History of the Medium Tank T20 Series, by R. P. Hunnicutt, Feist Publications, Inc., 1996. No ISBN number. This is part of the long running series and it's chock full of fascinating data on the tank and its development. Oddly, the book was not originally published by Presidio, but we are hearing that it will eventually rejoin their line.

Allied Axis #7, "Pershing at the Front," Ambersand Publishing, 2002. Our sister publication contains about 30 full-page operational images, photos of a monument vehicle and tech manual excerpts.

There are several other inexpensive references available on the Pershing and more are being released all the time.

Improving and enhancing the Italeri kit with a new update set from Trakz

PELLELINO 144 LVT(A)1 DETAIL SET



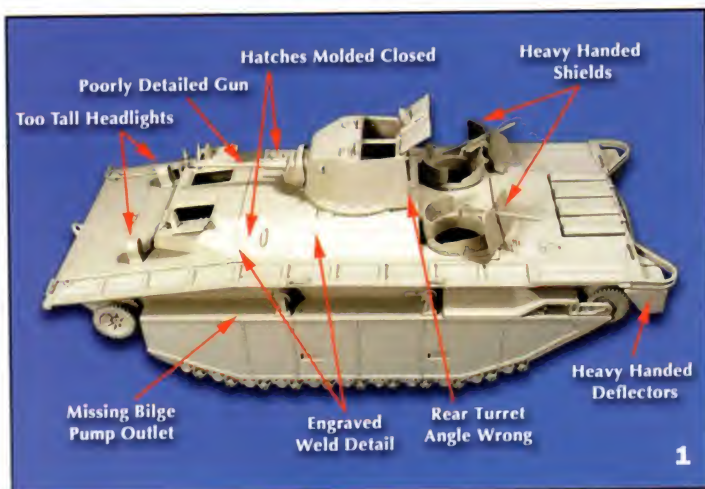
The LVT(A)1 fulfilled the need for something more accurate than naval shore bombardment and more powerful than the .30 & .50 caliber machine guns carried by the preceding models of LVTs used in assault landings in the Pacific theater. Production was carried out by FMC with 509 vehicles being produced. First used in combat during the Marshall Islands campaign in February 1944, the LVT(A)1 was the first LVT mounting a turret. The LVT(A)1, with a 37mm M6 gun mounted in a modified M5A1 Stuart turret, gave the assaulting forces the ability to direct immediate, accurate fire upon enemy bunkers and defensive positions. Considered a step in the right direction, as far as the assault forces were concerned, the LVT(A)1 underwent many minor improvements and modifications carried out both on the production line and in the field. The original designed "Scharif" style MG mounts proved too fragile and awkward in combat and were quickly replaced with what appears

to be a standard MG pintle mount and shield.

The basic Italeri kit

The American LVT family of vehicles was by far the most historically significant series of WWII vehicles to be overlooked by the plastic model producing companies. I would love to see Tamiya produce a series of WWII LVTs. However, this has yet to happen. The inaccuracies in the Italeri kit (see photo one) include the angle of the rear of the turret, which needs to be corrected to 90 degrees. The weld seams on the upper hull are supposed to be raised not engraved. The headlights are much too tall, as are their guards. The tow cable brackets are molded onto

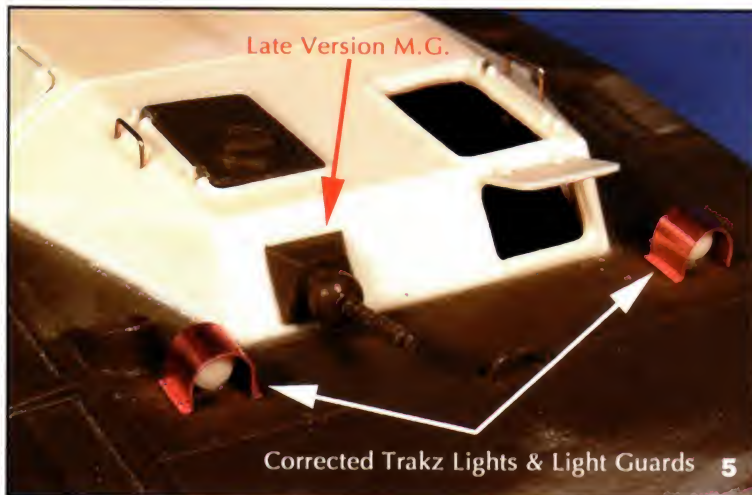
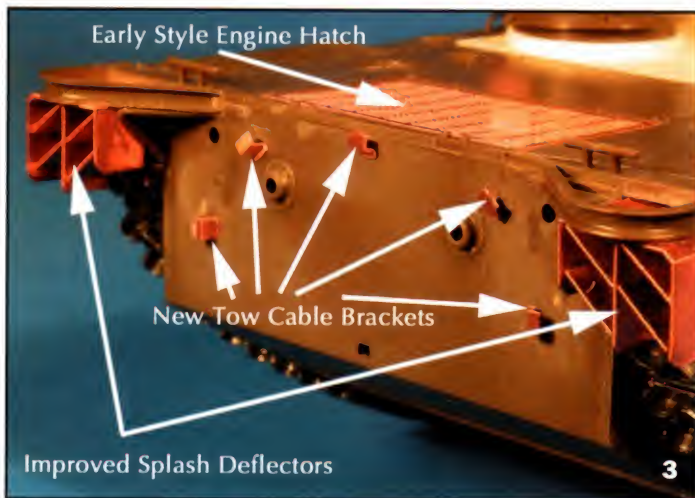
hatch interior periscope details are included. The 37mm main gun is the wrong shape and poorly produced and the splash deflectors are extremely heavy handed. While the Italeri version appears to be an early to mid production FMC produced vehicle (two step pocket pontoons), they chose to include the late version



the kit cable. The MG tubs, their mounts, details and gun shields are heavy handed and simplified. Italeri has also chosen to mold the upper hull side hatches and the driver's front hull vision flap in the closed position. No

also give you decals for four different vehicles. While all of these may seem to be quite a laundry list of problems, they can all be remedied with the Trakz LVT(A)1 Detail Set! Having now built five different versions of the LVT, all based on the Italeri LVT(A)1 basic kit, I can honestly say that Italeri has done a decent job in giving us the necessary components to make building all of the Trakz LVT related kits a fairly simple project. All of the problems with the Italeri LVT(A)1 are corrected by using the Trakz

armored engine access door and the optional late version front hull MG mount. It is also interesting to note that the Revell of Germany version of the LVT(A)1 kit is in fact the Italeri kit with two differences. First, Revell chose to give the early version an armored engine access hatch and they



LVT-A1 Detail Set. Overall, the basic components of the Italeri kit are quite useable. The lower hull, upper hull, suspension and tracks can all be used with little if any modifications.

The Trakz update

Ever since I started Harper Castings in 1985, one of my planned goals was to release a series of resin kits and conversions of WWII LVTs. For many years I collected technical manuals, factory drawings, books, photos, etc. All with the intent to make the LVT project a reality. When I came to work at VLS in 1999 I became aware that VLS had the resources already in place to make the LVT project happen. We sent the necessary references to master pattern maker Willy Peeters and waited for the patterns to start arriving. Willy has done a fine job creating this LVT detail set. This detail set contains 30 resin and 65 photo-etch parts and includes a Jordi Rubio aluminum lathe turned 37mm gun barrel. (Sweet).

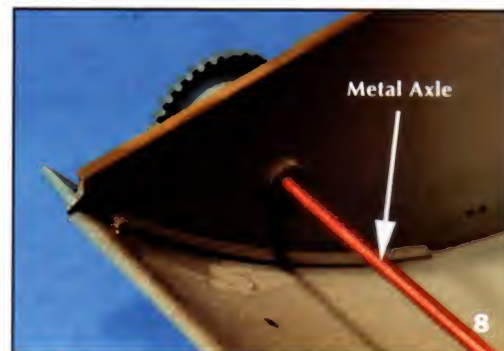
I began by using the well-illustrated instruction sheet as a guide. My first task was the correction of the rear turret angle of the Italeri kit turret to a true 90 degrees. Next, I assembled the six resin and four plastic rod pieces (not included) that make up the two "Scharif" ring MG tubs (photo two). (These type MG positions are sometimes referred to as "Scharif" rings. While researching the subject, I discovered that this style of mechanism was actually named for its designer "Scharif." The name has been so often mispronounced as "Scarfi" that it is the name commonly used today.) I decided to model the more common production version, which involved simply cutting the Italeri kit as shown in the instructions and gluing the photo-etched pintle part to it. I

used the photo-etched MG shields and their etched cradles. To be quite frank with you, I really hate photo-etched parts and even fairly basic etched parts and I do not get along! Sometimes, to avoid using the photo-etched parts, I will scratch build the parts from plastic bits using the etched part as a guide. In this case, however, I did use the etched kit parts with no problems! Next, I assembled the .30 caliber MGs, along with their ammo boxes. This was easily accomplished in about 30 minutes. These .30 caliber guns are my favorite .30s on the market and are available separately from Custom Dioramics.

The splash deflectors looked harder to assemble than they actually were. I just took my time and test fit the pieces before gluing. These parts are "handed," so I had to make sure I did not confuse the similar pieces (photo three). I then carefully removed the Italeri tow cable brackets from the rear of the hull and replaced them with the Trakz etched parts. Next, I turned my attention to the large resin upper hull deck piece that makes up the bulk of the Trakz kit (photo four). It is used in place of the Italeri kit part #40. The new resin replacement part is hollow cast and all of the hatches are separate parts, so they can be modeled open or closed. I was really surprised that Italeri chose to



engineer their kit with the side hatches in the closed position! I detailed the hull piece and hatches using wire for grab handles, per the Trakz instructions, and I removed the details from the Italeri hatches and replaced them with the etched





parts. I soon discovered a correction that needs to be made to the Trakz headlights. They need to be shortened and the etch light guards also need to be altered to fit the shortened headlights (**photo five**). The Trakz headlights were intended to replace the overly tall Italeri ones. However, the new ones are the same height as the Italeri pieces. Also, the photo-etch artwork for the light guards match the newly designed headlights, so they, as well, are too tall. Fortunately, this is a simple thing for the modeler to fix. I have included a photo here to illustrate the correct parts. The Trakz kit includes the early, unarmored engine hatch on the photo-etched sheet. I chose to use the Italeri later armored version.

installed. Using photos for reference, I noticed that the most common added on armor was on the front hull bow (**photo six**). I made this front hull armor from a sheet of ten thousandths plastic and made the eight mounting parts with bolt detail from plastic strip and rod.

I also fitted the Italeri late version .30 caliber front hull MG to the Trakz resin upper hull (also shown in photo five). The Trakz part has been engineered for this piece, as it is cast with a very thin membrane at this position that you can punch out and clean up with an X-acto knife. I added the hatch pad to the open turret hatch and the bilge pump exit pipe on the left side pontoon top. I have built several of these LVT-based kits and one

Other changes

Since I chose to model a late war version of the LVT(A)1 as it appeared on Peleliu in September of 1944, a few other modifications were necessary. Trakz has also released a set of photo-etch add on armor to spice up your LVT model. I bought a set of this armor in order to use it as a template. I made the armor from sheet plastic. By the time of the Peleliu invasion, most LVT(A)s had one or more of these additional armor plates

problem with every one of them has been the fit that leaves a gap where the front upper and lower hulls are supposed to meet, as shown in **photo seven**. It can quickly be fixed with some strip plastic and putty or by using the bow armor plate. An important tip is to install the tracks on the vehicle before you glue the upper hull to the lower hull. Otherwise it is quite difficult to get the tracks mounted. Another tip is that the drive sprocket mount is very weak. I have drilled out the drive sprockets and super glued them to a metal rod axle on every Italeri LVT based kit that I have built (**photo eight**).

Painting & markings

The subject of my model being an LVT(A)1 on Peleliu in 1944 meant that it would be painted in an over-all green color, instead of the earlier blue/gray color used on all LVTs up until 1944. Matching the exact shade of colors used on tanks in WWII can be a real crap shoot. In some instances I have been able to obtain actual paint chips directly from vehicles being restored today. I show color charts to veterans and get their input on the colors as best as they can remember them. But all this enables me to do is to get a ball park idea of the colors in question. I remember talking to my father about the colors of the Japanese Type 95 tanks that he fought on Peleliu. He told me that they were gray and black! The Japanese did not paint their armor gray and black, at least none that I have ever heard of. Because of all of the coral dust on Peleliu and the lack of shade or wind in the 115-degree heat, the vehicles were covered with a thick coating of chalky white dust and did appear to be gray. My father recalled aiming a bazooka at one vehicle about 60 feet away from his fox hole as that vehicle



headed straight for him, barreling through a dust cloud. He fired the bazooka, there was a flash and several other weapons that had targeted the same vehicle also scored hits. When the Japanese armor attack was over (about 10 minutes after it had started) the Marines counted fifteen knocked out Japanese tanks. My dad then walked over to inspect the carnage and he said that now all of the gray tanks were black. They were, from fire. He admitted that upon closer inspection he could see very faint patches of color and a few small vehicle markings of some type. My point is that the actual colors used by any army on their tanks in WWII should be researched as well as possible. And that carefully mixing the exact shades, taking scale effect into consideration and painting this color on your model should result in a factory fresh representation of the vehicle. However, if you wish to model the vehicle a few months or even years after leaving the factory, it's a whole different story.

Since most LVTs would have left the factory in the original blue/gray color and then been repainted the green color later in the field, I chose to paint my model in the blue/gray color first (**photo nine**). I then weathered that color with a dark wash of raw umber oil paint (**photo ten**). The blue/gray color I used was the Tamiya acrylic Medium Blue XF-18. I always base coat my models with Tamiya acrylic paint. I then weather them with oil paint and Humbrol enamel washes. I decided to use Humbrol HI-1 Mottle Green for the green topcoat. I applied that by dry brushing and stippling the paint over the blue, working in small one square inch areas at a time (**photo eleven**). My favorite part of modeling is the painting and weathering process. I really get into it. I apply thin washes of colors to get the desired effects that are not readily apparent to the naked eye (**photo twelve**). On this vehicle, for example, I used a garish lime green



color, an orange color, a vibrant blue color and a bright yellow color. These colors leave just a hint of their presence but it really adds depth to the look of the vehicle. I used a Mars Orange oil paint to represent the unique rusted metal look and applied washes of Humbrol Khaki Drill and Humbrol 148 (a flesh color) over the dried Mars Orange wash. I repeated these washes one over the other until I achieved the desired effect (**photo thirteen**). A Prisma Color PC949 "Metallic Silver" colored pencil was used to apply wear marks and scratches to the vehicle's surfaces. Using the colored pencil required a real light hand, keeping in mind the tiny scale and random pattern that the scratches need to look convincing. Many a model can really be ruined if this technique is not fully developed. I am present-

ly doing research and artwork for a set of LVT dry transfer markings to be released through Trakz in the near future. However, they were not available when I built this kit so I decided to hand paint the crude markings on the vehicle for the time being (**photo fourteen**). These markings were simply roughly painted. I will paint these out and apply the dry transfers when they become available. While the Italeri vinyl kit tracks that come with this model are not the greatest, they are by far the best offering of LVT tracks ever attempted in 1/35 scale. I have had to install them and then super glue them to the suspension components on every one of these kits I have built so far. It is interesting to note that since these tracks have to be installed so early in the building process of this kit, they get painted and weathered right along with the rest of the vehicle. The paint washes tend to puddle and settle in the cracks and grooves of the tracks. By the time painting and weathering of the vehicle was finished, the tracks only required a little dry brushing with a light

steel and graphite mix to bring them to life.

Final thoughts

Overall I am quite satisfied with the results of the finished model that can be built utilizing the Trakz and Italeri kits. If you wish to put a crew in your LVT, I recommend either of the Harper Castings USMC Tank Crews or the Warriors LVTs (they're actually the only ones!). I've got many more LVTs planned and you will read about them here. Plans are being discussed for a possible book that will cover modeling the whole series of WWII LVTs. In my next installment I will cover building the Trakz LVT2 as it appeared on Saipan in 1944.

—David E. Harper with assistance by Steve Hoard

MMIR RECCE

Italeri LVT1 Amtank. Kit number 6386. Suggested retail price \$35.00.

Trakz LVT1 Alligator Detail Set. Kit number TX0004. Suggested retail price \$32.95. Both kits graciously provided for review by the VLS Corp.

References

Stuart, A History of the American Light Tank, Volume I by R.P. Hunnicutt, Presidio Press, 1992. ISBN 0-89141-462-2.

US Amtracs and Amphibians at War 1941-45 by Steven J. Zaloga and George Balin, Concord Publications 2000. A great general reference that is chock full of photos of all the LTV variants. ISBN 962-361-655-4.

U.S. Army Ordinance Supply Catalog Manual SNLG-241, January 1945. Not a tech manual, but rather a part catalog with tons of close-up shots of the LVT parts.

STUART, LITTLE

ACADEMY'S ANSWER TO THE U.S. M3 LIGHT TANK



The Stuart was one of a series of light tanks developed by the U.S. Army in the twenties and thirties. Their development roughly paralleled the German light tanks, but due to severe under funding, American development was much slower and by the time the war started, the Stuart was already obsolete. However, the tanks were further developed during the war, being improved and modernized.

The British, in a tight spot for tanks, got a slew of M3s. They added a few modifications of their own and it's been said that the Brits call the M3 the "Honey," because it was a Honey of a tank mechanically when compared with their own. I'm betting they also liked the HE round for the 37mm gun. The 2-pounder in many British tanks of the time came equipped with only solid shot.

The Stuart has a rather interesting modeling history. The three Tamiya kits have been the subject of so much discussion that it's not funny. Those three were the M3, the M5A1 and the M8 HMC. The main criticism of those kits was that they were inaccurate. Any one of a number of things, such as motorization holes, or just plain math errors caused this. This didn't seem to stop Tamiya from selling about a billion of these things. The secret, I think, was that the price continually went down over the

years. When the M3 was closed out last year in Japan (before its recent reissue), it was selling for about five bucks.

As more and more new kits come out, the gaps start to get real obvious. Firmly within one of those gaps lies the Stuart. Academy first announced this kit at the 2002 Nuremberg Toy Fair. It caused quite a stir, being a one hundred percent new armor kit. The first kit announced was the M3 "Honey" and this is to be followed by an M3A1. Sounds cool to me.

I will admit that I am not a Stuart expert. I know there are some out there who know the vehicle intimately and can cite the dimensions of every single bolt and rivet. That's not me. I have built the M3 and the M8, if that qualifies me at all. I picked this kit for review because it seemed like a very nice model. And, you know what? It is.

To give you the best possible picture of this, I'll be building the model straight from the box, with no modifications, except for the antenna.

Honey, I shrunk the model

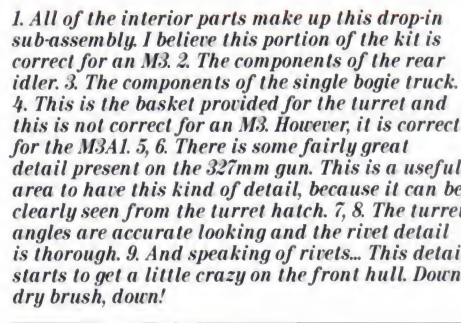
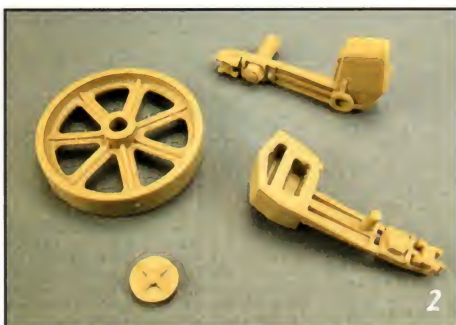
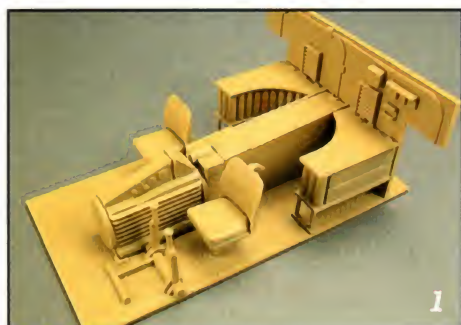
The box is pretty vivid, with a smashing color illustration of the Honey racing across the desert with a couple of Grants. Interestingly, the slate gray of the desert splinter scheme is shown on the box as kind of a blazing turquoise (it is not). The kit is molded in tan styrene and contains a nice set of

decals, accurate band tracks, and yes, two bonus sprues of link-to-link tracks! In addition to the kit parts, Academy also tosses in one of its "goodie" sprues, with lots of extra gear.

Options are provided to build either the British version or the American M3 version.

It is quickly evident that this model is teeny. The lower hull is only half the size of the bigger models I'm used to. I followed the suggested sequence pretty much to the letter. Construction starts with the suspension and there were no significant fit problems encountered. Just watch out for the top skids on the bogies (parts J4), each of them installs in the opposite direction. All the bogies, as well as the rear idler, had a nice positive contact with the hull. As a result, they sit flat and level.

The next step is that weenie little hull. One of the most significant aspects of the kit is that it has a relatively complete interior. All this stuff gets chucked in here next. The interior is composed of a basic floor and rear wall module that contains ammo racks, transmission, power tunnel, instrument panel, seats, etc. It's pretty cool, really. It doesn't appear that it would take a lot of time to finish, if you want to just see something through the open hatches. Given the very prominent nature of the front hatches, this is a first rate idea. The commander's hatch is also a good source of light from above.



1. All of the interior parts make up this drop-in sub-assembly. I believe this portion of the kit is correct for an M3. 2. The components of the rear idler. 3. The components of the single bogie truck. 4. This is the basket provided for the turret and this is not correct for an M3. However, it is correct for the M3A1. 5, 6. There is some fairly great detail present on the 327mm gun. This is a useful area to have this kind of detail, because it can be clearly seen from the turret hatch. 7, 8. The turret angles are accurate looking and the rivet detail is thorough. 9. And speaking of rivets... This detail starts to get a little crazy on the front hull. Down dry brush, down!

I didn't paint mine, I only built it to take photos of it. The radio, part B21, is so nice, I tossed it in the parts box.

Since I was skipping the interior or decorating, I was able to close-up the hull. There is nothing else to add at this point, except the driver's instrument panels, which I left off.

The covers for the .30 cal sponson ports are added now. The ports themselves are present, but not the guns. If you opt to do an early M3 (stateside, Tunisia), you'll need to scrounge these from your parts box. The instructions have you add the sand shields now, but I left them off until later.

There are also a number of stowage boxes throughout the hull that are provided for the Honey version. This was the version I was going for, so they were all installed now. I made bottoms for the two large boxes at the rear because they are cast open.

When installing the large front hatches, I felt it was better to add the lower hatch first, then the center support, followed by the other hatches.

The hull gets finished up by adding all the other bits, like the headlamps, guards, air cleaners, tools, and in my case, a fabulous set of three flimsies and a rack to contain them.

Interestingly, the rear-mounted shovel is shown in the instructions installed with the head facing the left. It should actually face to the right.



I missed this (oops).

One of the things that is also very noticeable is the extremely well rendered bolt and rivet detail throughout the upper hull. This kit is a dry brusher's dream come true.

Take me to your turret

The interior details extend right up into the turret. The first thing tackled here is the construction of the gun and its installation on the turret ring. Ten parts make up the gun and the co-axial .30 cal. Once again, this is more than enough for "the peek through the hole." A turret basket is provided, but this is not correct for an M3. The turret basket was introduced with the M3A1 and its absence in the M3 was one of the biggest gripes about the vehicle in service. I stick mine on for the heck of it (you can't

see anyway). If you want an accurate interior, you'll be in for some scratchbuilding.

The main body of the turret is a single casting, which is nifty. This includes the panel up the back that leads to the commander's cupola. This would be a nasty seam to fill. The welded turret is depicted in the kit. The British installed a C-shaped rack on the front of the turret roof to keep the hatch within reach of the commander. This is a somewhat thick piece, but since it is a rather complex shape, I decided to use it as is.

The mantlet is one of the last parts to be added. It has an extremely pronounced cast texture. This is still evident after painting, so some dulling down of this surface may be appropriate.

Another Brit option is the addition of the smoke launchers to the side of the turret. I left these off.

The final touch is the (now famous) Academy .30 cal and its side mounted pedestal.

And now for the tricky part

In order to properly install and paint the running gear, tracks and sand shields, the lower hull needs to be painted and weathered first. I went with the band track option primarily because they are very accurate (the end connectors are where they should be!) and fit nice and tight to the suspension. The link-to-link option just seems too tedious to me. However, this is yet another addition to my quickly filling parts box.

To paint the hull, I chose regular ol' Tamiya Dark Yellow, XF-60. This may be a bit too yellow when compared to the actual color. However, another close color, Tamiya Buff, looked a little too light to me.



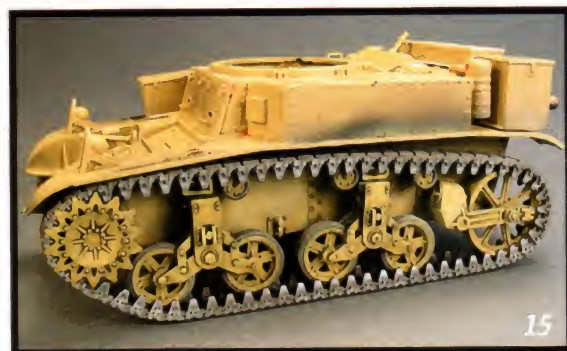
10



11



12



15



13



14

I sprayed only the lower hull and suspension, along with the lower front and lower rear hull. When this was dry, I weathered the area with an oil wash and drybrushed overall with Vallejo Beige. The tires were picked out with dark gray.

The tracks were sprayed with Tamiya Metallic Gray XF-56. Dry brushing was accomplished with Vallejo Silver Plate and the rubber pads were painted with flat black. Light colored pastel was worked onto the face of the tracks and then gently rubbed off the surface of the pads to simulate dust.

Once all this was accomplished, I could add the sand shields. The fit is good, but there should be a pronounced seam across the front fenders, so don't fill this too much.

Now it was time to mask (and mask, and mask). I cut typing paper to roughly the shape of the track run and slipped it up and under the shields. I then wrapped more paper around the front and back runs, totally covering the pre-painted area. All the paper was secured with Tamiya masking tape.

Before proceeding, I added an antenna made from brass wire and two pennants made from lead foil.

And now I really paint

With the tracks tucked away, I went at the rest of the tank with my airbrush. I wanted to render one of the distinctive splinter schemes seen on British Stuarts in the desert. I used more of the dark yellow as a base coat and when this was dry, I carefully outlined the top portion of the scheme with more of the Tamiya masking tape. You know, I have used this stuff for years, but this is the first time that I have actually used it to mask paint. I figured that because it's Tamiya tape, it would not pull up Tamiya colors. And it didn't.

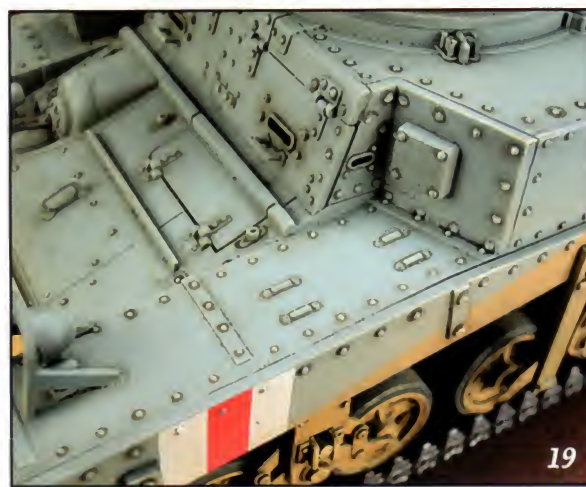
The taping took some time, as I had to cover all of the hull and the turret top. The instructions have the top of the turret as dark green and my other references bear this out. I used Tamiya Olive Drab, XF-62 and taped it off using the corner of the turret

10. Not only rivets, but also nicely executed tie-downs are found all over the hull. Unfortunately, they get covered up in the Honey version. 11. No motorization holes here! 12. The hull is ready to receive the interior right out of the box. Note the molded-in sponson covers. 13. Like many of the recent Academy kits, the Stuart contains this useful .30 cal and cradle. 14. Here are three of the stowage boxes provided for the Honey version and the Flimsies and their rack, at lower right. 15. It was necessary to finish, then completely mask the lower hull before proceeding to add the sand skirts. This is just before adding the masking material. 16. The finished model. The pennants were made from lead foil. The rear fenders are missing their inside panels and this can be seen at the lower left. The shovel head is also facing in the wrong direction, something I failed to notice until after the model was finished.



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17. Masking around this area on the rear deck was the toughest part of the paint job. Check out the detailed vent and the filler caps. 18. My slate gray splinter scheme turned out a bit blue, but my theory is that the sun would fade the paint to a bluer shade. All of the decals seen on the finished model are from the kit-supplied sheet. 19. The upper sponsons are plugged over, as they should be. The front visors are large enough to provide a healthy view of any added interior.



top as the edge. Perhaps the trickiest part of the masking job was creating the sharp angles on the cupola.

To create the slate gray, I used Vallejo Medium Gray mixed with a small amount of light blue. I know this color is not all that blue, but I wanted to give the kit a subtle flair. It came out a bit too blue, but the wash toned it down. The cradle for the .30 cal was left dark yellow.

I immediately applied Tamiya Clear to gloss the areas that would receive decals. This was left to dry overnight. I used the kit decals and they went down well, but I had to use several applications of Solvaset to get them to snuggle in. I chose the second of two schemes for the 8th King's Royal Irish Hussars of the 7th Armored Division. I like the large red and white flashes on the hull and turret, and the "rat" symbol on the front fender.

More washing commenced after the decals were dry. This also included a "pin wash" on the dozens and dozens of rivets and bolts all over the hull and turret. Dry brushing was done with shades of beige and light gray. The pennants on the antenna were painted red.

A coat of Vallejo flat finished the job.

Yeah, so?


I felt that this was really a honey of a model (sorry). The fit was great, the parts were well thought out and executed, and it was also a quick build. Without super detailing, this could easily be a weekender.

However... I have already been hearing a lot of complaints about this kit's accuracy. This has come from some very credible sources, but in all deference to these guys—I just don't see it. Although I didn't give the model the "caliper treatment," I did carefully compare the finished model with plans in the Hunnicutt Light Tanks book and with plans from the Squadron/Signal book. In spite of the facts that the plans are 1/48th scale and I stared at them until my eyes went fuzzy, I could not discern any significant proportional errors in the model. Besides all that, it really looks like a Stuart!

I appreciate our hobbie's unique concern with accuracy and I actually admire those who really

get into the nuts and bolts. It's good to know that that information is there if you want to take advantage of it. BUT... I would truly hate to see anyone pass up this fine model because of some twisted obsession with absolute finite accuracy in 1/35th scale. Build a model and have some fun for cryin' out loud!

The bottom line is that you get a great fitting kit, with excellent detail, a very diverse and easy to use decal sheet, a full interior, link-to-link AND band-type tracks, all for a scant \$25.00. This is less than the cost of aftermarket tracks!

Just build it. 

—Pat Stansell

MMIR RECCE

Academy M3 Stuart "Honey." Kit number 1399. Kit graciously provided by the manufacturer. Suggested retail price \$25.00.

References

Stuart A History of the American Light Tank, R.P. Hunnicutt, Presidio Press 1992, ISBN 0-89141-462-2. The biggest and the baddest. The complete story of the Stuart series, plus the development of every other light armored tracked vehicle the U.S. fielded in World War Two. Definitely the best value for money in the series.

The Stuart Light Series, by Bryan Perrett, Osprey Publishing London 1980, ISBN 0-85045-370-4. And oldie, but a goodie. Some good color plates.

Allied Tanks North Africa World War II, by Bryan Perrett, Arms and Armour Press 1986, ISBN 0-85368-775-7. Decent photos throughout.

Stuart U.S. Light tanks in Action by Steve Zaloga, Squadron Signal Publications 1979. ISBN 0-89747-084-2. The best written account of the Stuart after Hunnicutt, this book also has good scale plans of the M3. No specific information on the Honey.

ACHILLES, HEEL!

Building a Self Propelled, 17-Pounder, M 10, Mk II in styrene



The Self-Propelled 17-pdr M-10 was designed and developed by the British and entered production in early 1944. They were first used in action on D-Day. They were assigned as mobile reserves to rapidly reinforce threatened sections of the front and to act as immediate anti-tank gun screens. The 17-pdr required heavy counterweights on the turret. There were two types of weights that differentiated the Mk I or V type from the Mk II or duckbill type of turret. The SP 17-pdr with its high muzzle velocity and effective ammo was extremely lethal to all that opposed it.

The Academy kit was molded in tan plastic and provided many options for the running gear, shackles, decals, radios, front differential and others. There were over 500 parts in the box. Beautifully molded weld beads and other fine details covered the model. The styrene plastic was soft, so care was taken when sanding or cutting off parts. The tracks were the band type and require heating to join them together. At the end of construction there were many extra pieces to add to the growing parts box.

Suspension

Academy provided a choice of suspension wheels, drive sprockets and track support skids. The wheels came with inserts for the hollow castings and after assembly excellent solid wheels with grease and relief nipples or fittings emerged. These grease and relief fittings should only be on the outside of each wheel, as there was only one lubricating and one relief fitting on each wheel. The trucks required a little sanding and

scraping to remove seams. Four bolt holes were drilled into each truck face with a fine drill. References showed these holes either open or with bolts which have safety wires connecting them. These holes allowed the support roller bracket to be bolted from either side, resulting in a left or right suspension assembly. Four bolt heads were added to each track support skid. Four bolts were also needed to hold the support roller bracket to the truck assembly. The six bolts for the bracket caps were molded in position and the casting marks were well done. The angle bracket or brace that extends from the trucks and attaches to the underside of the hull did not have the two indentations normally seen on the suspension assemblies. Two grooves were cut into the plastic angles and then widened with a motor tool and cutting bit. The Academy suspension assemblies with horizontal support rollers were excellent and should be released as a separate kit, as they do for tracks.

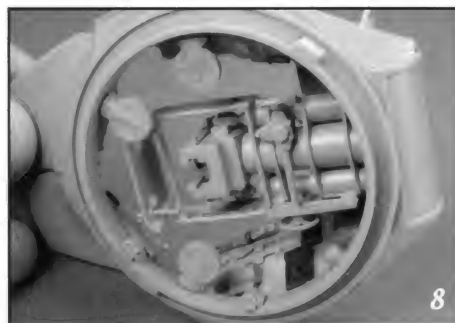
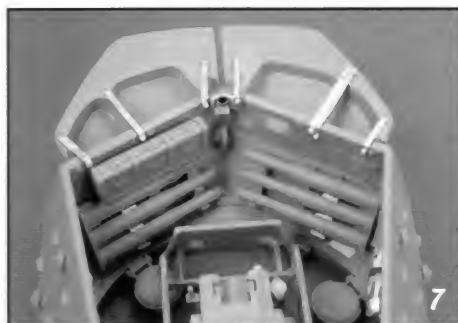
The suspension assemblies were added to the hull and glued in position. Bolts were added just in front of the first assembly to depict the attachment bolts for the differential and final drive case. There were two large ejection pin marks that needed to be filled on the final reduction assembly housing.

Hull interior

The driver's control panel was well detailed, with molded wiring on the panner. In this area generally was stored a greatcoat, haversack, Hellesen lamp, fire extinguisher, charts and books. The British #19 radio was chosen and attached to the right hull side. On this side greatcoats, haversacks, blankets, water and satchel bags were stored. The kit came with two con-

trol boxes and wires were added from thin solder. The SP 17-pdr. M10 did not utilize the American water bottle storage rack, as the crew's bottles were stored in a different location adjacent to the radio and in the turret. As a result, the area for the US bottles was left empty, except for small attachment points made from styrene strip. Spare headlamps were carried behind the two crew seats. The plastic lenses for these lamps were replaced with MV Product's railroad lenses. Behind the driver's seat were stored the portable stove, ration boxes and ammunition. The assistant driver's seat had greatcoats stored below; smoke mortar rounds, inspection light and a five gallon Blitz water can stored behind it. This can was the British copy of the jerry can and was provided in the Academy kit. The hull floor had the herringbone anti-skid pattern, finger holds for floor hatches and electric junction box nicely molded. This junction box allowed electrical connections to be made for the radio and the gun's firing solenoid. The rear firewall was well detailed with oil cooler, fire extinguisher, stowage boxes, electrical wiring, switches and so on. An ammo box was added to the center stowage box just below the transmission cooler, as 18 smoke bombs were stored in this box. A #2 stove and stove end were stored on the rear wall. The American supplied fire extinguishers were retained and kept inside of the tank. Two British methyl bromide fire extinguishers were molded in resin and supplied for the exterior. All the extra equipment added came from the extensive parts box or plundered from old kits. What's in your wallet, matey?

A choice of two differential housings was provided, along with two types of towing shackles. Everything was well detailed and molded.



1-3. Note casting numbers and drilled holes. These holes allowed the rollers to be bolted on for left or right sided suspension trucks. Wheels were supplied with inner faces but should not have the grease nipples. The projecting step was scribed, then a drill bit was used to cut two grooves on the underside of the projecting bracket. Four bolts were added to the track skids and holes were drilled in the bogie assembly face. Four bolts need to be added for the roller attachment also. 4. Wheel trucks in position. Note the channels cut into the projecting angle next to the three bolt heads on the suspension

assembly. 5. Front differential required some filling and extra bolts were added. 6. Additional parts were used to detail the gun breech. Front sight opening was filled. 7. Braces for the counterweights were made from a soda can and styrene bolts added. Strips were added between the rounds and a line was scribed on the Sten ammo clips. 8. Underside view of turret. Note teeth on turret race and extra storage on turret wall. 9. The front step was fashioned from styrene strip. Overlaps were filed smooth and extra detail was added.

Ammo stowage

The 17 pounder fired several different types of ammo; HE, AP, APC, APCBC and APDS. The ammunition stowage for Academy's kit was incorrect, or at least did not match the references consulted. The 17-pounder ammo was stored without packing tubes and the arrangement was very different from the M-10. Styrene sheet was used to scratch build the ammo holders and the rounds came from the spares box and Accurate Armour's ammo accessory pack AO3. The rounds faced each other and were in four divided areas on the panniers. The 44 rounds sat on what appeared to be thick rubber or wood holders that were slit in sections and fitted like a yoke over the rounds. These layers could be separated to allow the rounds to be extracted. These different sized holders were kept together by canvas straps and buckles. New ammo bulkheads were fashioned from sheet styrene and the holders were built by laminating either two or three pieces of thick styrene sheet. Lacquer thinner was the gluing agent used for the assembly. Holes were drilled to accept either the body or just the bullet end of the rounds. Indentations were also made in the top to allow two rounds to fit on top of each pair of holders. Four sets were put together and various types of ammunition rounds were added to the scratch built holders. The straps were formed from soda can strips and buck-

les were made from copper wire. The formed holders at the rear engine bulkhead were cut off and replaced by thickened sheet. New bulkheads were also added near the driver's compartment. These bulkheads were in two parts, one of which was hollow and the other had indentations for the rounds. This scratch building was time consuming as it took a few tries to orient the rounds in order to get 11 to fit in each compartment. Rounds were left off the holders to display the correct storage positions and the three types of ammo used were displayed and painted accordingly. These ammo holders were built using the references available but like everything else, a copy of the tech manual drawings or photographs of a preserved vehicle will show the definite specifications and disposition for these articles. References consulted also showed different styles of ammunition holders.

Engine area

The mufflers were assembled and attached to the rear engine plate. The towing pintle, towing eyes and shackles normally seen on British vehicles were selected. Academy provided a choice of parts for this step. The engine sidewalls and fuel tanks were fixed in position. There is room for a diesel engine to be dropped in, so it will probably be seen as an aftermarket item or as an accessory from Academy. The exhaust deflector had large pin ejector marks, which were filled with

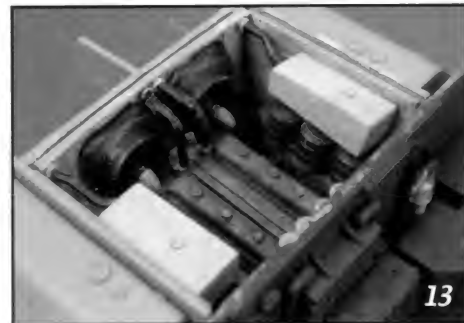
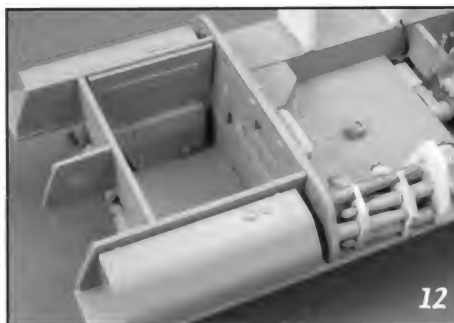
cianoacrylate glue and sanded smooth. This deflector was nicely detailed with strengthening ribs and bolt heads. Exhaust stacks for deep wading could be easily scratch built. British tanks of this type with deep wading stacks had the stacks extended to avoid the counterweight. They also had special skid rails attached to the rear to prevent damage to the trunks when the vehicle exited the landing craft. Mufflers were shortened so the rear exhaust opening and stack appeared smaller on many Commonwealth vehicles.

It was decided to add Tank Workshop's engine (0053). This resin GM6046 diesel power unit came with the engine bay and was well detailed with fans and shrouds, filler tubes, filters, hoses and water tanks. It was designed for the Tamiya kits and conversions. In order to get it to fit into the Academy engine bay, lots of test fittings and nips and tucks of both the engine area and the resin kit were required. Saws and a motor tool came in very handy. The resin kit was nice and lots of detail was provided. Due to the tight squeeze some parts were left off from the original kit. Most of the engine was hidden once the hull was in place but an excellent diorama could be made of crewmen working on the twin diesel engines with the engine deck and doors removed. All in all, a nice kit in itself.

Hull exterior

The inside hinge seam was missing and so one was

10. View of underside with correct escape hatch, circular oil drain and engine panels. Minor filling was required for some ejector pin marks on the sponson plates. 11. Stowage for British vehicle with first-aid box, straps and buckles added. Note different stowage arrangement and fire extinguishers on the rear end. 12. Engine bay and exhaust area before engine was added. Nice detail for a diorama on engine bay repairs. 13. Engine bay viewed from the starboard side. Note extra box near the oil cooler, fire extinguisher and nicely detailed floor area and diesel engine. 14. Ammunition stowage racks with various types of ammo. Note straps and buckles from soda can and wire. Different types of after market ammo were used: resin, white metal and styrene to depict the tank rounds. 15. Ammunition stowage for the 17-pounder rounds. Styrene laminates and strips from a soda can formed the yokes and straps. Buckles were made from copper wire. 16. The completed turret interior. 17. The decals are from the Accurate Armour line.



cut into the front fender with a fine saw blade. The two bolts on the outside of the front fenders were elongated and so were cutoff and replaced with bolt heads from hexagonal rod slices. Three bolt heads were also added to the joint, where the fenders meet the hull. The crew's doors were assembled and came well detailed with M6 periscopes, covers, rings and hatch locks. The hatch hooks and eye rings on the outside were added from copper wire and glued. Academy detailed the hatches inside and out so they may be displayed open or closed. Two ejector pin marks had to be filled in each door in order to be displayed open.

The grouser bar holders were well detailed with washers and bolt heads and stood off from the hull sides. Academy thinned the plastic near the edges so they appear more to scale thickness and the standoff lugs were cut off as directed. These points were probably for attaching the holder to the bosses. Holes were drilled in the holders for the attachment of the grousers; these holes were offset on each piece of channel iron, so they were marked from either side and then drilled out. Grousers were not usually supplied with steel tracks but were standard issue with rubber tracks of T41 and T51 types. However, some references show them attached to the side of steel tracked tanks. Perhaps they added a little protection to the crew or the tracks were switched to a different type and the grousers remained on the tank. On the kit, a few T51 grouser bars were added to the bottom of the racks in order to support the extra jerry cans and other stowage. Nicely molded can holders were supplied with the kit as accessories and straps and buckles were added. There were two large dents in the side hull where the injected styrene sheet was deformed but these were hidden once the grouser holders and stowage items were attached.

The armored fuel covers were added and each came

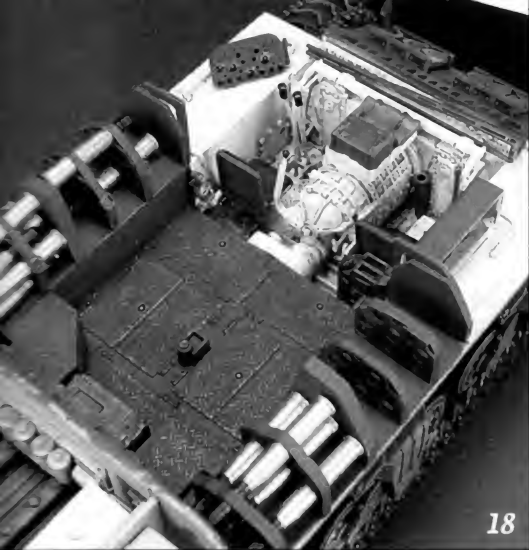
with the locking pin, all that needed to be added was some fine chain, if desired. The identification plates, which were fixed next to each cover, were well molded and the lettering could be read: (water, lubricating oil, diesel fuel oil). The bosses on the glacis plate were positioned and glued. Two references showed added armor plate on the hull front, so this option could be done with sheet styrene, if desired. The M6 periscopes and flaps were added after cleaning up. The armored covers of the periscope flaps and bosses are very delicate and due to the soft styrene, care must be taken when removing them from the sprues or deformed items will result. Eye rings and latches were added to the two front hatches. These were made from fine copper wire. The two front

hatches were left open to display the interior. The angles of the hatch openings are not really as sharp as those depicted on the kit. The crew's hatches were normally seen at right angles to the hull and tilted back slightly. In order to display them this way the hinges had to be adjusted and patched.

Tool stowage

Tool stowage on British vehicles varied from the US versions. The tools from the kit were used but they were stowed according to the plans for British vehicles. Parts were cleaned up with a sharp knife and straps and buckles were added. The 10-pound sledge and pry bar was moved to the engine deck and fixed on either side of the gun crutch. The track-adjusting wrench was shortened, along with the handle for the pick, and





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fixed on the port rear deck. A small first aid box was cobbled up from styrene strip and attached to the end of the deck. Two methyl bromide fire extinguishers, short shovel, pick head, rear lights and light guards were added to the rear plate. These guards were thick and could be replaced by photo etched items which would be closer to scale. Some vehicles carried cleaning rods externally for the 17 pdr. and they were stored on this rear plate. The rear plate came with raised outlines for tool placement and these were shaved off with a sharp scraper. This was reminiscent of the old aircraft kits with raised markings for decal placement. They were convenient to show placement but were not necessary. They could have been done more discretely, as they show if the tools were to be placed over them. The gun crutch was shortened and added to the rear deck.

Main gun

The main gun was tackled next. The breech ring and breech block were glued together. The breech operating handle should be positioned to coincide with the breech being either opened or closed. After attaching the recoil cylinders to the breech ring the resulting joint lines were carefully scraped off. The breech appeared to be shorter than references showed. The elevating gear and wheels were sanded to remove seams and ejection pin marks were filled and sanded. Large ejection pin marks were observed in the gun recoil guard assembly and were filled with styrene discs and then sanded. A little extra detail was added to the gun from styrene rod and strip. The traverse wheel was sanded, a firing button was added and the grip was cut off and shifted to the lower edge of one of the wheel spokes. The elevating gear or screw was not seen on the kit and due to lack of references, no attempt was made to add one. This gear is very noticeable on the M-10's three-inch gun and hangs down into the turret, often protected by a canvas sheath.

The gun barrel was assembled and the muzzle break and counterweights were added. Filler was used on the muzzle, around the side ports, as seams were still visible after joining the two parts. The muzzle break appeared to be a little on the small side and not well rounded but was nicely detailed. The mantlet lifting rings were carefully sanded and then added. The opening for the gun sight was drilled out and styrene tube was added for the optical telescope. The opening for the sight on the turret below the rotor shield was set too high so the upper edge of the opening was filled. The sharp ridge on this piece was also sanded down to give a more rounded appearance. Academy provided a plethora of casting marks, numbers and letters on one of the sprues and they could be added anywhere on the tank as needed. Little crescent shapes were provided for the turret tarpaulin rods but this was noticed only after cobbling up some for use on the counterweights.

Turret stowage

The turret walls were a little thick and could be sanded down to provide thinner walls more to scale. Two large holes were filled with styrene strips along



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18. The completed and painted interior with the ammunition in place. The top hull was left unglued for access. 19. A view of the finished Tank Workshop engine through the open kit doors. 20. The port side grouser rack with its added stowage.

the turret race; these were located at the locking keys or locating tabs, where the turret attaches to the hull on the kit. There were raised outlines for equipment placement on the interior turret walls and a few ejection pinholes. These were filled with styrene discs or cyanoacrylate glue, depending on their depth, and then sanded smooth. The raised outlines were scraped off. The kit's instructions show only two turret seats but three seats were provided and the location of the third was obvious. Pin ejector marks below the seats must be filled if they are to be displayed up in stowed position. Turret traverse wheel and traverse locks were provided and were fixed in position as directed. The gun traveling lock and shock were provided as optional parts and were fixed below the upper turret front extension plate. When not in use they were folded up and locked with the pins. Starting on the right side of the turret, the Sten guns were positioned and below them, two water bottles and a binocular case were attached. The grenade boxes were moved from the left wall and attached to the right wall just above the rangefinder. Another box was added for the sight. On the rear wall, the holder for the 32 Sten magazines was fitted into position.

Many parts not provided in the kit came from the scrap box or were built from styrene rod and strip.

Painting

Since this was an open topped vehicle it had to be painted in sub-sections. The driving compartment was painted in off-white, while the rest of the interior was painted with Tamiya's olive drab. The underside of the hull was painted white like the original to increase reflectivity of light.

The engine well was painted in white, while the

engine was painted gray. The large air cleaners, hoses, fan shrouds and fans were painted black. After drying, washes of brown and black were added to depict oil and grease stains. The driver's console was painted green with black dials, white indicators, and then glossed with varnish to depict glass on the gauges.

Shells were brass with flat black bullets and white tips as appropriate.

When the interior was completed the turret was attached and the driving compartment hatches and turret were masked off. The vehicle was then sprayed with Humbrol 117; given a wash of dark brown, dry brushed then dusted with pastels. Worn paint was depicted with a graphite pencil. The tracks were left in the original color and given washes of black and brown oil paint. A silver pencil was used to touch-up some of the worn and raised parts of the tracks.

The decals were from Accurate Armour's range and consisted of water slide and rub-on types. The decals chosen represented a vehicle from O'Connor's 'White Knight' Corps. The markings are for the Eighth Corps, 91st Anti-Tank Regiment, Royal Artillery. In July 1944, orders were issued to paint air recognition signs on the whole surface of the vehicle's turret. On M-10s the turret counterweight was painted white. Careful observation of British tank turrets in reference books will show entire top surfaces painted in light colors. References allude to white and yellow surfaces depending on the group.

Conclusion

It seemed unusual that a company would put out such an impressive kit with great shortcomings in the areas of stowage for tank tools and ammunition. There are lots of tank destroyers surviving in Europe (SP 17-pdr, M-10, and Achilles 2C) and better research could have been done. Perhaps they were catering to a different demographic and not track geeks. Accurate Armour produced an excellent resin kit and Academy should have striven to match their accuracy in plastic. There were many good points about this kit, including the outstanding suspension bogies, but a lot of work was still needed to clean up ejector pin marks and to fix the stowage of ammo and tools. In time, some company will come out with a set to make this kit more accurate and save the builder a lot of time and effort in producing a more accurate SP 17pdr, M-10. Overall the kit was enjoyable to build and the changes and corrections made it a little challenging. A second earlier version with deep wading gear is under construction and the second time around is always better.

Get this kit, build and paint it the way you like and enjoy your hobby.

—Carlos D'Arcy

MMiR RECCE

Academy British tank Destroyer M10A1 Achilles. Kit number 1392. Suggested retail \$37.00.

References

AFV News, Vol 22#1, Vol 26#1, Vol 27#3, Vol 28#1.

Allied Tank Destroyers, Perrett, B., Vanguard, 1979 UK. ISBN -0850453151.

Ground Power Magazine, No 50/7, 1998.

M10/M36 Achilles US SPG WWII, No 2036, Wydawnictwo Books, Poland.

Sherman - A History of the American Medium Tank, Hunnicutt R P, Presidio Press, Ca. 1978, ISBN-0891410805.

Tank Magazine 1989 #12.

US Tank Destroyers of WW II, Zaloga, S., Tanks Illustrated No. 19.

US Tank Destroyers in Action, No 36, Squadron Signal Pubs, USA, 1998, ISBN-089747385X.

US Tank Destroyers in Combat 1941-1945, No 7005, -Zaloga, S., Concord Publications, HK. 1996. ISBN-9623616090.

Photographs of Budget Collection Vehicle.

The Japanese Third Car



Building the FineMolds Type 95 Light Tanks

Marine Tank Battles in the Pacific by Oscar Gilbert. I was particularly interested in the second largest tank battle of that theatre, which took place on 15 September 1944 on Peleliu Island. I am not sure what the largest was. A part of a tank company commanded by Captain Amano of the 14th Infantry Division attacked the US Marines who had just landed. The unit consisted of 16 Type 95 Light Tanks supported by an infantry company. The Japanese tanks were wiped out by the Marines with bazookas and Sherman's, but the charge was a little unusual since it was one of the only times the

This article will cover the Japanese Type 95 light tank kits that are currently available. The first kit will be the FineMolds standard Type 95 Light Tank. The second will be the FineMolds Type 95 Light Tank Manchurian Special. A third, and the basis for a future feature, will be the Type 4 Light Tank. This is a MR Models conversion using the FineMolds Type 95 as the basis. The Type 4 was basically a Type 95 with a new turret.

The beginnings

In 1933 the Japanese Army started a program to develop a Light Tank. Prior to this new program they had the Type 89 Medium Tank and the Type 92 Combat Car. Both of these vehicles were being used in Northern China and Manchuria at the time. It was learned from these deployments that the medium tank was too heavy for mountainous terrain and the combat car was not sufficiently armed. It was therefore decided that a light tank was needed. The result of this effort to produce a light tank was the Type 95. The Type 95 Light Tank was given the designation "Ha-Go" which translates to "Third Car" because it was the third tank developed by the Japanese. Mitsubishi Heavy Industries built the first prototype in 1934, but after testing it was decided to build a second prototype. The biggest problem was both the infantry and cavalry were trying to get their own requirements met and some compromises were required. The second prototype seemed to satisfy more of these requirements than the first so it was ordered into production in 1935. The Type 95 was produced until 1943 with over 1,165 being built.

Oddly enough, a number of Type 95s have survived and are fairly accessible. I have personally photographed four Type 95s in various museums including; one each in the Patton Museum, Fort Knox, Kentucky, the U.S. Army Museum of Hawaii



in Honolulu, the U.S. Army Ordnance Museum at Aberdeen Proving Grounds, Maryland and the fourth at the Tank Museum at Bovington, UK.

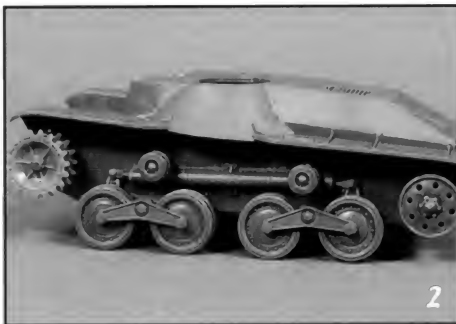
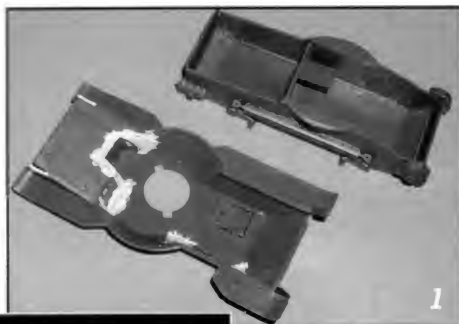
The Type 95 tank has been incorrectly identified in the past as the Type 95 'Kyu-go'. Even normally infallible Chamberlain and Ellis blew it. It turns out that 'Kyu-go' is 95 in Japanese, which means it is being called the Type 95 95. The Type 95 had a crew of three and was armed with a 37mm main gun and two 7.7mm machine guns. One machine gun is in the manually operated turret and the other in the bow. The Type 95 was powered by an 110hp four-cylinder air-cooled rear mounted diesel engine and had a speed of around 25kmph.

I just finished reading the excellent new book

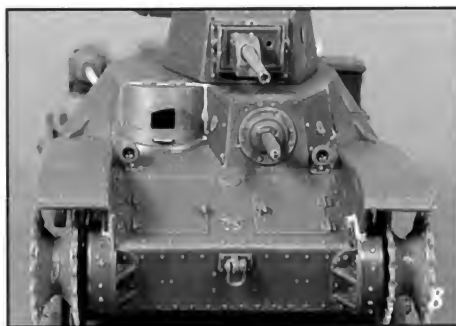
Japanese used their tanks and infantry in a combined operation. Actually, some reports said that at least some of the infantry were in 55 gal drums mounted on the rear of the tanks. I would love to see a photo of that, but apparently none were taken.

The FineMolds kit and parts

The FineMolds kit of the Type 95 is an old kit and I believe their first tank kit. When it was first released it was one very expensive kit, which, if I remember correctly, was around \$150. It was later reduced in price when, I think, FineMolds finally realized that they could not sell plastic kits for that price. The kit consists of six sprues of olive green plastic, a few white metal parts, rubber band



Type 95 "Ha-Go"



1. Before the tank hull was sealed I filled in some rather large gaps using putty. Notice the screen that is from the FineMolds photo-etch set goes on the inside. 2. The suspension looks complicated but is really pretty easy to assemble. The drive sprockets are from the Modelkasten track set. 3. The tow cable is made from white metal and very well cast. The muffer has several white metal parts and the screen comes both with the FineMolds kit and their photo-etch set. 4. The order of gluing these parts on is very important. First the crowbar, then the shovel, followed by the pick and finally the jack. Notice the screen underneath the grill. 5. The brass barrel is from FineMolds

but sold separately. The machine gun's barrel was replaced with a small hollow brass tube. 6. The hasp and padlock and pistol port covers all come from the photo-etch set. 7. Notice the extra rivets on the top of the gun mantlet and side of the machine gun housing. These extra rivets are found on the sprue behind one of the labels. 8. The rivets on the forward differential housings were also added. The instructions for this kit forgot to mention them, but they are shown in the Manchurian Special kit. 9. The completed Modelkasten tracks are being test fitted before painting. These are really time consuming to assemble but look great when complete.

tracks, a photo-etch for the muffer screen and an extensive decal sheet. The six pages of instructions are virtually all in Japanese with the only English words for paint colors. There is also a four-page history and painting guide, which is also completely in Japanese. Not being satisfied with such a complete kit, I decided to try all the after market items available for this kit. This consists of a FineMolds 37mm brass gun barrel and a photo-etch set, both sold separately. Additionally, FineMolds does sell a separate track link set but Modelkasten recently released a workable track set for this tank and I wanted to try it instead.

Sorry I don't read Japanese

The FineMolds photo-etch set is rather strange. I am sure it is for this kit. However, the instructions are totally in Japanese and there are a few drawings to show how to assemble some of the parts. The problem is they forgot or neglected to show where the parts go. I am sure the text describes this, but since I don't read Japanese I was kind of out of luck. A few of the parts were obvious, like the screen for the muffer, but I could only figure out a few of the other items. I do list these when I was lucky enough to make a guess where they went, but some of them

totally stumped me.

Basic suspension parts

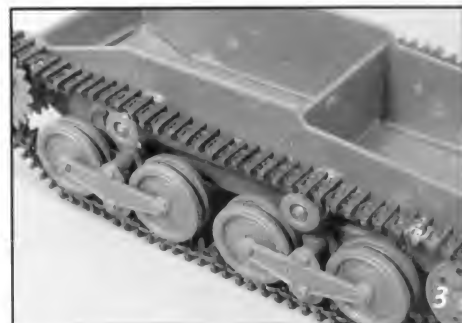
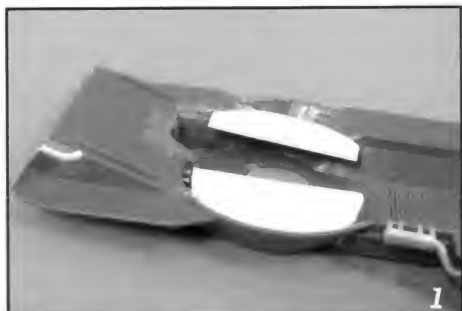
I began construction by cleaning and assembling the roadwheels, return rollers, bogies and idlers. The Modelkasten track set includes replacement drive sprockets so, of course, I used these. I then assembled the hull bottom, which consists of four sides and a partition in the center. There were a few areas that needed filling but not much. The top is another story. I know this is an old kit and, even though it has been reissued, it is obvious they did not retool the molds. Even so it still is far superior to most of the kits we are seeing coming out of Eastern Europe right now. There is a fair amount of minor flash indicating well used molds. The front plate machine gun section, part A8, and driver's main hatch, part A7, when glued on left fairly large holes that needed filling. Additionally, the engine cover, part A15, has a pretty big gap in the front section that needed filling also. The way I handled this was once all these pieces were glued on I filled the gaps with Squadron Shop white putty from the rear. There is also a gap between the front fender and the front differential housing that should not be there. I cut out a very small crescent piece of

sheet styrene for both sides then glued them onto the top hull piece underneath the fenders. Once dry, I cleaned these crescent pieces up.

The last piece I added before closing was the photo-etch part 22 engine screen which goes on the inside, not the outside of the rear square engine vent. I then glued the top and bottom hull pieces together. Next, I glued on all the suspension pieces, including the bogies, idlers and drive sprockets, but not the return rollers, which I left off till after the tracks were on.

The Modelkasten tracks

The Modelkasten tracks were next. These are really tiny but after I got started I found they were really not too bad. The trick for me at least was to cut the track links (10) off the sprues and place them on the jig that is furnished with the set. I then poured a small puddle of plastic cement on a piece of wax paper. I dipped the connecting pins in the glue, then inserted them into the links. After one side was complete, I cut off the sprue and pushed the pins into the track link with a small drill bit. Using tweezers, I then dipped each horn in the glue and placed it on the link. After all the links were assembled, I glued the last pins in, completing the



Type 95 North Manchuria Version "Ha-Go"



1. The two inserts that go below the sponsons were missing from my kit (it was second hand) so I had to make replacement parts from sheet styrene. The fillers in the front wheel wells were also made from sheet styrene because of a gap left when the top and bottom hulls are glued. 2. The muffer is a combination of white metal and plastic parts. The gap on the forward edge of the engine access door needs filling. 3. The individual track links are very easy to build and look a lot better than the rubber band tracks but not as good as the Modelkasten tracks. 4. I spot painted the model with primer to check my fills. Extra rivets were added to the forward machine gun section. 5. The turret was simple. The brass barrel for the main gun is a Fine Molds product that is sold separately. The machine gun was drilled out and a small hollow brass tube was used to replace the barrel. 6. A brass wire was used to replace the kit handle on the driver's visor. The tracks are glued on so I painted them on the tank, which is actually very easy if you are careful. 7. The muffer screen was



mounted but not glued for the camouflage painting. It was removed then and the muffer was painted separately. 8. The license plate was stolen from an old kit since mine was missing. The tow cable is really a work of art and only requires a little cleanup.

track. As with all Modelkasten tracks, these are very delicate, so a lot of care must be used in handling or they will break. It did take me about 2 1/2 evenings to assemble them.

Upper detail

I now started detailing the hull by adding the photo-etch, part 9, which replaces the plastic parts, A21 and A22. These are latches for the engine access door, part A15. For the box, A16, I replaced the hasp with photo-etch part 8 and a pad lock, part 12. I cleaned up the tools that go on the rear left fender and glued them in the following order, the breaker bar, part A12, then A13 and the box A12. Last, I glued on the white metal jack.

The muffer was glued together and the seam lines were removed. I cleaned up the two white metal parts, the manifold and exhaust pipe, and glued them on. This assembly was then glued on the right rear fender. I now formed the muffer using the form, part A11. This form is just one of the nice little extras that FineMolds includes. I did not glue the screen on till after I finished painting. I replaced the four hinges, parts B20, with photo-etch, part 2.

The turret was the last major piece of construction and it was pretty easy to complete. There is a bottom piece, D2, that I glued onto the main turret, D1. I assembled the breech assembly, parts D9 and D10, and then glued the brass barrel in. For the two

machine guns, I replaced the barrels with a very small diameter hollow brass tube by drilling them out. I also cut off the three pistol ports that are molded on the turret and bow machine gun housing, part A8, and replaced them with the photo-etch, parts 6.

Don't forget the rivets

There are three different places that extra rivets need to be added. Oddly enough, the instructions for this kit do not mention it, but the rivet heads are supplied on the sprues on the back of labels. The kit instructions for the Type 95 Manchurian Special do show where they go. The first place is on top of the mantlet where four rivets are added. The second is around the differential housings on the front of the tank. The third is on both sides of the bow machine gun armor.

Let the painting begin

As I mentioned above, I wanted the tank to be one of the ones that made the famous charge on Peleliu Island. Fortunately for me, one of the options for decals is a tank of the tank company of the 14th Infantry Division Peleliu Island, 1944. I therefore decided to paint this tank in a late war color. I first washed the tank with warm soapy water. I then sprayed it with a base coat of Tamiya XF-11 J.N. green. I then painted a camouflage pattern using Tamiya XF-64 Red Brown and Tamiya XF-59 Desert Yellow. I sprayed the tracks with Polly

Scale panzer red brown and, using the same color, painted the muffer. The tool handles were painted Vallejo medium flesh and the metal parts black gray. The roadwheel rims were also painted black gray.

I now added the kit decals. I first sprayed the areas with Tamiya clear gloss, then put the decals on using Solvaset setting solution. I added the white strip at the top of the commander's cupola signifying a command tank. This particular tank would have belonged to Platoon Commander Tanaka.

I gave the whole vehicle a very thin wash of black oil paint. I went back and added a wash of 50/50 black/burnt umber wash on the hatch lines. For the tracks I used Tamiya XF-1 flat black wash. I then dry brushed with titanium white, sap green, and burnt umber oils and for the metal parts Rub-n-Buff silver. Last I added the MV red lens, LS220, for the taillight and two clear lenses, LS27, for the headlights.

Here comes the infantry

I had decided to use the new DML Japanese Infantry soldiers for Iwo Jima set for my figures. I assembled two of the four figures from the set. I put on all the gear that the back of the box instructions suggested. The only thing I added were slings for the weapons, which I made out of thin sheet lead. I painted the figures using a combination of oils and Vallejo acrylic paints.

For the base I cut out an irregular shaped piece from sheet styrofoam. I also cut out a small piece,



The base of the vignette was made from several pieces of styrofoam covered with tile grout and Cellucay. The palm plant and tree came from an old Verlinden palm tree set. The palms are brass, which were first painted with dark green then dry brushed.

which I sloped for the rear and glued it on the base. I covered the styrofoam with a mix of tile grout and Cellucay, which I had pre-colored with acrylic paints. I had started using the cheap acrylic paints sold in the larger bottles in arts and craft stores, rather than waste my expensive ones for the base material. I sprinkled different sizes of gravel on it while it was still wet. I then gave it a wash of acrylic paints, like burnt umber. I then dry brushed with oils. I added a plant from the left over Verlinden palm tree set. I also cut up the palm tree and after painting it glued it on the rear of the base.

Building the Manchurian special

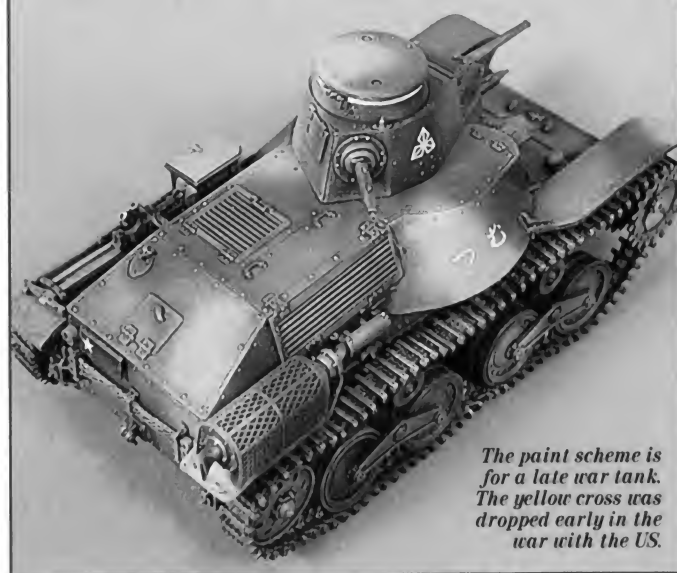
In the first section, I described the development of the Japanese Type 95 Light Tank. Here, I'll discuss a specially modified and produced version of the Type 95, often referred to in the west as the Manchurian Special. For the most part, the Type 95 was considered a very good tank. Unfortunately, one shortcoming was noted when operating in Northern China and Manchuria. The suspension system had a tendency to get hung up on the ridges of the Manchurian cornfields. The problem was the distance between the roadwheels in the bogies was too far and the ridge would hang up the tank.

For the Japanese the solution for this problem was to produce a special model of the Type 95. The suspension was modified by inverting the bogie arm and adding an additional small wheel between the main roadwheels. The results were not considered very successful and only a few were produced. It is not known if this modified Type 95 ever received a unique name other than the "Special Model" by the Japanese.

Other than the modified suspension, the Type 95 appeared to be unchanged.

Another FineMolds kit

The FineMolds kit of the Light Tank Type 95 North Manchuria version is like the standard Type 95 kit described above. Rubber band tracks are provided in the kit, but FineMolds also sells a set of separate track links of black plastic, which I used with this kit. There are also a few white metal parts, including a jack, tow cable and muffler exhaust. There is also a photo-etch sheet of the muffler cover, plus a decal sheet included. I also added the 37mm brass barrel from FineMolds, which like the



The paint scheme is for a late war tank. The yellow cross was dropped early in the war with the US.



The markings are for the Tank Company, 14th Infantry Division Peleliu Island 1944. These are excellent water slide decals, on which I only had to use a little Solvaset.

tracks, they sell separately. I did not use FineMolds photo-etch sets on this model. The instruction sheet is also entirely in Japanese. Like the first model, this is a pretty simple kit and since the instructions are well illustrated, I had no difficulty.

Starting with the bogies

Since I already described the construction in the first section, I will only cover the high points and differences here. I started with the roadwheels, drive sprockets and idlers which I glued together first. Next, the four separate bogies were assembled. These bogies seem to be the chief difference between the North Manchuria and regular version of the Type 95. There is an extra roller that goes on the bottom of each bogie and the frames are upside down compared to the regular version.

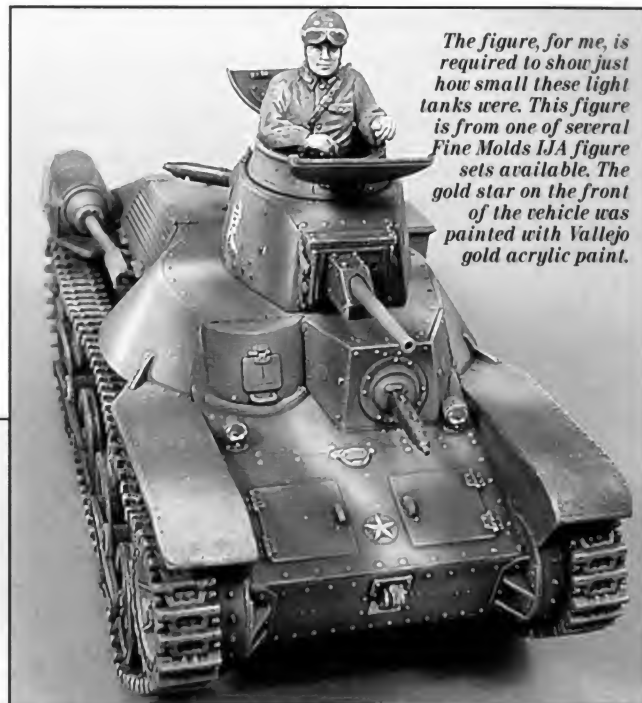
The chassis bottom consists of six parts, which is normal for FineMolds. The suspension parts that go on the hull sides were then attached. Next, the bogies were glued on making sure they were aligned. The FineMolds separate track links were then glued together, starting with pairs, then gluing the pairs together until longer sections were achieved. I glued several links together, then draped them around the idler and drive sprocket while the glue was still wet. I then glued longer sections onto the drive sprocket and connected them. I left a little sag in the tracks. In my reference photographs I have seen everything from very tight to very loose on these tanks.

Assembling the hull

The hull top is one piece with a few hatches to be glued on. There are supposed to be two fillets that go under the side bulges underneath the turret. My kit was missing a few pieces. This was a second hand kit, and I had to make my own from sheet styrene. As with the first kit of the Type 95 I described in the first article, there were some annoying problems with gaps that had to be dealt with. The vent for the engine, A15, and the two pieces on the front, A7 and 8, all fit poorly. There are considerable gaps with all these pieces, which required puttying from the rear to fill in the gaps. One of these gaps was where the front fender is supposed to sit flat on the front differential housing. As with my first kit, I made small filler pieces out of sheet styrene and glued them on before gluing the top and bottom hull together.

I added the muffler on the right rear fender, including the white metal exhaust. The photo-etch screen was shaped using the plastic guide provided in the kit. I did not glue this screen in place until painting was complete since I needed to remove it to paint the muffler separately. The shovel, pick and white metal jack were added to the left fender.

The hull top was then glued on the bottom. The fit was pretty good and only a little filling was needed. I then added extra rivets on the front differentials and around the hull machine gunner's housing, as shown in the instructions. I used a Historex punch and die set to make the smallest bolt heads I could before I noticed that the rivets



The figure, for me, is required to show just how small these light tanks were. This figure is from one of several Fine Molds IJA figure sets available. The gold star on the front of the vehicle was painted with Vallejo gold acrylic paint.

The detail on the inside of the commander's hatch is very nice and all comes molded on. The yellow strip that runs around the vehicle is supposed to be a cross when viewed from above. The Japanese used this device in the early part of the war.



turret. This tank is so small, I felt a figure was necessary to get an idea of scale.

Wrapping it up

The basic Ha-Go was a very easy kit to build. The quality of the molds is very good. Unfortunately, it suffers from a lot of flash, but nothing compared to some Eastern European manufacturers. Overall, it is not a bad kit and, actually, both versions build into very good little models, without a lot of work. The separate track links were the most time consuming part of the project. What I can't fathom is the original asking price for this kit. Even now it is still fairly expensive, unless you buy it directly from Japan.

The Modelkasten tracks look really good, but are a lot of work and, of course, very expensive. I think after using both sets, I would go with the FineMolds link set as first choice. I can definitely say the separately sold FineMolds photo-etch set is a waste of money and would not recommend it for either kit.

—Jim Hensley

were included on the sprues. I added the machine gun in the hull after I hollowed out the barrel area and put in a very small hollow brass barrel. I was also missing a few more pieces, like the front and rear tow points and shackles, but I again found something similar in my spares box.

I then assembled the turret. I used the FineMolds brass barrel instead of the kit one. I also left the commander's hatch open since I planned to have a figure in it. The rear machine gun was added, again with the same brass tube inserted in it. There are a few more bolt heads that need to be added to the main gun mantlet as shown in the instructions.

Painting the Manchurian Candidate

The paint work here is similar to the first kit, but I went with an early war scheme. After a quick warm water bath, I sprayed the whole tank with XF-26 deep green for the base color. Next, I sprayed a camouflage pattern, first with XF-10 flat brown, then XF-60 dark yellow. Lastly, I sprayed the yellow cross that was on Manchurian tanks using XF-3 flat yellow. I then painted the tracks with Polly Scale rust and the tool handles with Vallejo tan.

I think the kit I had was pretty old, since the decals were badly cracked, so I did not even attempt to use them. Anyway, I had a new set of dry transfers from Ted Dyer. This is the second set he has had made and this one is much better than the first. The sheet is for Japanese Tank insignia and includes some nice marking drawings. The markings I chose are for a tank regiment in Manchuria. I also added a small Japanese flag to the front of the tank and a license plate number to the rear. I then sprayed the whole

tank with a light coat of Polly Scale semi-gloss clear to protect the decals and Tamiya paint, which tends to leave finger prints if handled too much. Finishing and drybrushing were as described above.

I also added MV lenses to the small headlights and a red one for the taillight. I painted the gold star on the front using Vallejo gold paint. The figure is a FineMolds tanker I painted and glued into the

MMiR RECCE

FineMolds Type 95 "Ha-Go." Kit number FM16. Suggested retail price \$30.00.

FineMolds IJA Light Tank Type 95 North Manchuria Version "Ha-Go," Kit number FM-2. Suggested retail price \$29.21.

FineMolds IJA Type 94 37mm Barrel set. Kit number MG-08. Suggested retail price \$6.67.

FineMolds IJA Type 95 Light Tank Track. Kit number MG-27. \$15.21.

FineMolds IJA Type 95 Light Tank Photo-etch Parts Set. Kit number MG28. Suggested retail price \$10.85.

Modelkasten Type 95 Light Tank Track. Kit number SK-50. Suggested retail price \$25.00.

DML Japanese Army Infantry Iwo Jima 1945. Kit number 6044. Suggested retail price \$6.67.

References

Chamberlain, Peter & Ellis, Chris. *Light Tank Type 95 Kyu-go. Armour in Profile No. 22*, London, 1967 Even though they got the name wrong, this is still a good reference.

Gilbert, Oscar E. *Marine Tank Battles In The Pacific*, Combined Publishing, Pennsylvania, 2001, ISBN 1-58097-050-8. Very enjoyable reading and more about Japanese armor than I would have guessed.

Hara, Tomio LTG (Retired) *Japanese Combat Cars, Light Tanks and Tankettes, AFV Weapons Profile #54*, Profile Publications Ltd., Windsor, UK February 1973. The primary reliable source for Japanese armor development.

Roland, Paul. *Japanese Type 95 Light Tank "Ha-Go" Series*, Merriam Press Monograph No. M-55, Bennington, Vermont 1988. There is a little write up here on the Special.

Kimura, S. *Japanese Tanks and Armoured Vehicles*, Argonauts Publications, Tokyo 2000.

Japanese Combat Vehicles of W.W. II, Ground Power No. 30, Tokyo, Japan, 1996.

Neubaufahrzeug nicely

Building the Armo multi-media kit



Germany's decision in 1933 to rearm its military was in direct opposition to the Treaty of Versailles they signed after World War I. Efforts to disguise actual tank development resulted in them being classified as "agricultural tractors." One of the initial orders was intended to develop a medium tank with multiple turrets. The Neubaufahrzeug (Nb Fz) was the result, being based on an earlier Rheinmetall-Borsig tractor design.

Multi-turreted tank design sprang from the notion that tanks were supposed to be "land battle-ships" bristling with firepower. The Soviet Union was a large proponent of this theory, fielding the T-28, T-35, and SMK tanks. However, these designs were unwieldy, and were a failure on the battlefield.

Germany's Nb Fz weighed 23 tons, and was armed with 7.5cm and 3.7cm guns mounted side-by-side in the main turret. Two smaller turrets, mounted fore and aft, closely resembled Panzerkampfwagen I turrets. They were armed with single MG 13 7.92mm machineguns. An additional MG 13 was mounted in a ball mount next to the main gun.

The armor was maximum thickness on the hull

front at 20mm. The turret was protected at its front with 15mm armor. The crew complement was six.

Only five Nb Fz were produced, the first two of which were soft steel prototypes. These served as trainers until 1940. The three with production armor were fielded under Panzer-Abteilung z.b.V.40 in Oslo, Norway in April 1940. The surviving two were returned to Germany later that year, but it is assumed that they were scrapped.

Cromwell Models was probably the first to offer this vehicle in kit form. More recently, Corée produced its version. Both are complete kits featuring resin, metal, and photo-etch.

The Armo kit overview

Resin rules here, as everything is cast in amber colored resin, including the tracks. Three PART photo-etch sheets are included, featuring complete fenders and tool clasps. PART photo-etch is every bit as nice as Aber.

The instructions are printed on both sides of an 11" x 22" page with an exploded-view diagram for

parts placement. Part numbers are tiny and hard to read from the busy diagram. A brief history of the vehicle and painting recommendation are included, but markings will have to be sourced elsewhere.

Major components are cast hollow—the lower hull tub, roof, and three turrets. This approach makes interior detailing easy, if desired. It also reduces resin material to keep cost and model weight down. All crew hatches are separate and feature interior detailing.

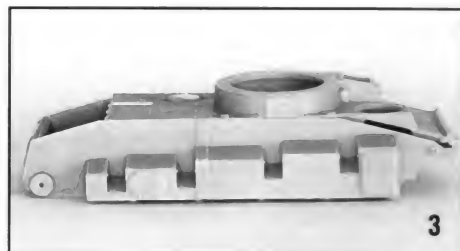
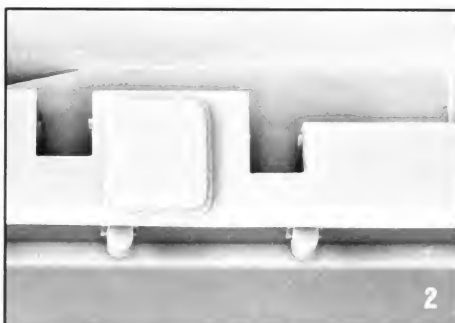
The suspension components are numerous; 44 bogey wheel halves, 16 support roller halves, plus the sprockets and idlers. Two spare road wheels are included. The tracks are cast as six-segment and single link pieces.

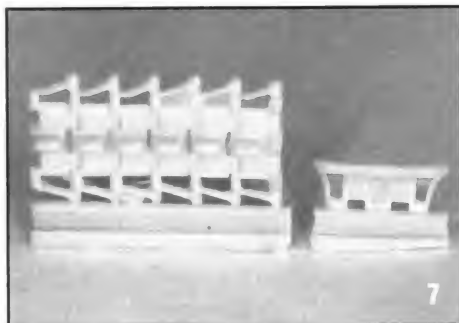
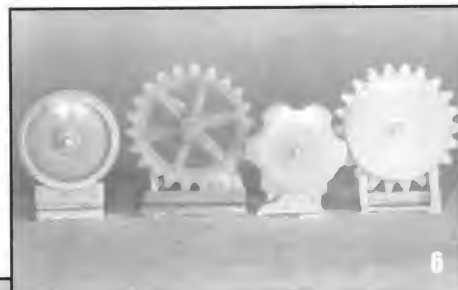
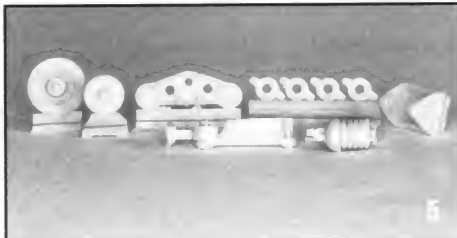
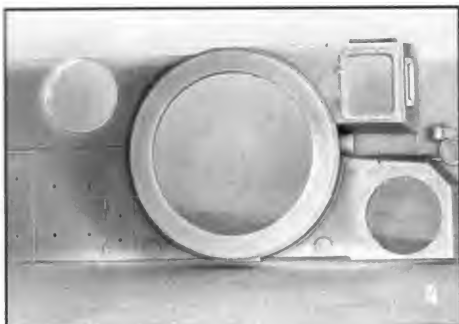
Casting quality throughout is very good to excellent. Only occasional bubble holes were encountered. One significant mold misalignment flaw was found on the lower sponson sides. Warping was rare, resulting in excellent fit for this type of medium. The main hull and turret pieces are straight and true.

The parts were first sorted, counted, and inspected. Only one part was missing—a bogey arm. An e-mail to Jadar Hobbies in Poland quickly



1. Glacis detail showing vision slit and horn housing. 2 This was the only major casting flaw. Sanding removed surrounding rivets, but they were replaced with new ones punched from lead foil. 3. Here the two hull halves are dry fitted together. Once the pour plugs toward the front were removed, the two parts snapped together easily.





4. The upper hull, showing the hatch openings. 5. The suspension group. Note the delicate frame for the support rollers at far right. There were 60 wheel halves to clean up, but they were cast very cleanly. 6. The driver group. The sprocket was reduced in width to accept

Friulmodellismo tracks, and a brass rod shaft inserted for easier attachment to the hull. 7. The track segments were cast very well, but the convenience of Friulmodellismo track was preferred. 8. The tool group, essential for a healthy kit. The banana-shaped cleaning rods were replaced with straight ones from Elephant. 9. The hollow cast turret, detailed hatches, cupola ring, and gun mount. 10. The secondary turrets and separate hatches. Replacement barrels were sourced from a DML weapons set. 11. At left, the front and rear mudguards, fender supports, and tool clasps. On the right, tread plate segments and more fender supports. 12. The fenders are the large pieces in the center. The tread plate segments are below them.

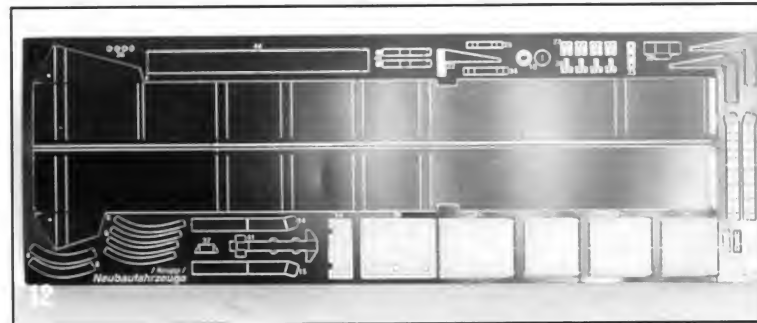
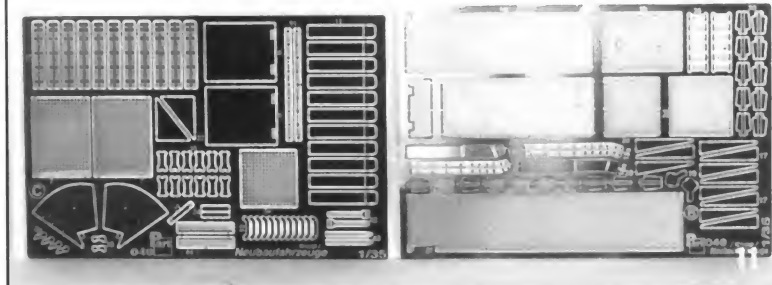
method. The exhaust outlet and engine breather domes were added next, followed by side facing port hatches. Two small lights with punched-foil lenses were installed in front of these hatches.

The driver's hatch was easily snapped into position. The kit's flat photo-etch handle was replaced with a round wire one. The central headlight and photo-etch horn were also added at this time. A weld bead added to the glacis covered a construction joint line that was actually present on the real vehicle. Two photo-etch strips on the glacis sides were later found to interfere with the mudguards and were removed.

Got a whole lotta tracks

Armo made a commendable effort casting their tracks in resin segments, but inspection revealed casting flaws and several broken ones. Resin track is also inherently difficult to install, especially in short segments. In addition, reference sources pointed to 38 cm width track, very similar to early production Panzer III or Panzer IV track. The ARMO tracks were measured at 40 cm wide, which was definitely too wide for the period.

These factors warranted taking a serious look



resulted with the part arriving safely on my doorstep.

The process of removing the over pour blocks from the parts was minimal and trouble-free. Cyanoacrylate (CA) glue was used for most of the construction; occasionally five-minute epoxy was preferred. CA glue was also used as filler in tiny bubble holes.

Just one more turret, please

Each turret was assembled by affixing a base plate piece to the turret body. The separate turret hatches fit well to their openings. The main gun/mantlet piece required careful cleanup to preserve the shape of the barrels. The muzzles were defined by using a pen vise. A blob of A+B putty was used to attach the mantlet to the turret face. An antenna post and lift hooks were added at this stage. The photo-etch hinges on the commander's cupola were replaced with styrene ones with slightly better fit.

The two secondary turrets were assembled with their hatches closed, and the delicately cast lift hooks were affixed. New barrels were sourced from a DML weapons set.

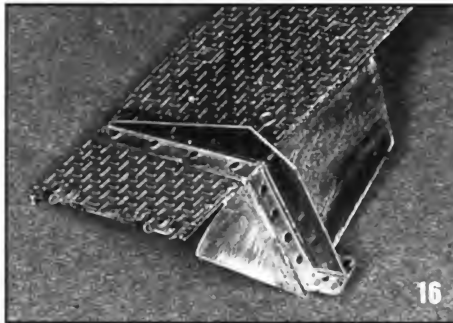
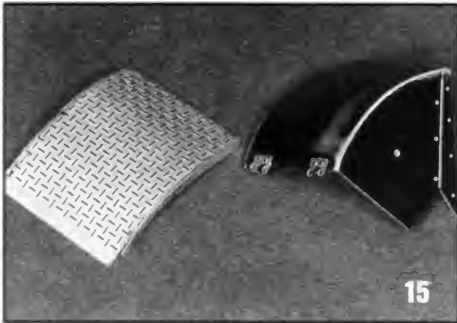
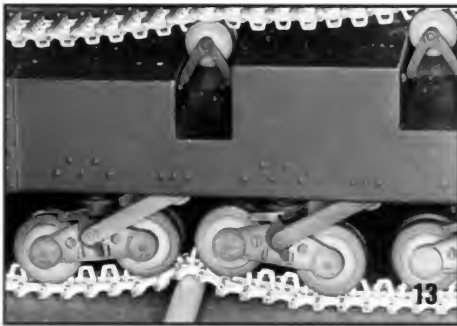
Hull construction

The hull roof and engine deck snapped into the hull tub after slight tweaking with an emery board. The molding flaw on the lower sponson sides was repaired, but many rivets were lost in the sanding process. Replacement rivets were punched from lead foil.

The instructions direct installing wire lift handles to the engine deck using your favorite

at aftermarket tracks, since they are convenient and familiar to most modelers. However, only 36 cm wide tracks were available. Friulmodellismo was chosen over Model Kasten because of lower cost and better availability in the USA. The difference between 38 cm and 36 cm in 1/35th scale was not considered significant. Two sets were needed because of the longer length the Nb Fz has over a Panzer III/IV.

Friulmodellismo's white metal links assemble with the included steel wire and remain workable when completed. The wire is inserted from one side and pushed to the end of the link, then cut flush. It's



13. The Friulmodellismo track in action after the suspension modification allowed the bogey to self-level with the track. 14. The tube segment modification on the left that helped make the bogey move with the track. 15. The rear and front mudguards. 16. Close up of front right fender with soldered support. 17. Obscure detailing, like the engine compartment grill and fasteners on the rear plate, were not overlooked by ARMO. 18. The exhaust muffler was too high where it met the engine deck's armored exhaust outlet, so the outlet part was cut down slightly to correct.

tutions for part numbers called out in the diagram that must be followed.

Photo-etch is normally assembled with CA glue, but it does not flex well and can break at inopportune moments. Soldering the pieces makes a much stronger bond, so that was the method used, as much as it was practical. Soldering is not a difficult technique, but it's critical that the joints be clean with bright brass showing. Unfortunately, an oxidation preventative surface had to first be sanded off

usually necessary to clean out the hole with a matching drill bit first.

The wire tended to fall out of the links a lot, so it was replaced with nylon fishing monofilament. Once the monofilament was pushed to the end of the link, it was snipped flush with sharp surgical scissors. The end was then "mushroomed" by passing a flame near to it. It worked great with this size track, but it may not for larger track links.

Friulmodellismo track sags by itself if the length is right. Continuous test fitting helped to arrive at the correct number of links, about 120 links per side.

The number of parts seemed to make it a daunting task. However, assembly went smoothly.

The road wheels were sanded smooth and any bubble holes filled. Before the parts were assembled, they were first sprayed flat black, since it would be difficult to paint after everything had been assembled.

One modification made a world of difference to the functioning of the bogeys. A centrally located resin spring at the center of each bogey affixes the whole assembly to the hull sponsons. The bogey arms connect with this spring and sandwich the road wheels between two mounting plates. This was going to be difficult to keep aligned while the glue dried. The improvement was to replace a solid part at the bottom of the spring with a segment of tubing. Then the bogey arms could thread through this tube

and allow free movement for the bogey. They would now "self level" themselves to the ground. Small photo-etch pieces (their function could not be ascertained) were attached to the upper part of each mounting plate to finish their construction.

The rear mounted drive sprockets were reduced in width to accommodate the narrower Friulmodellismo track. The resin shaft was replaced with brass rod to allow free rotation and easy removal during the track's test fitting. The front idlers did not need width corrections, but a spacer ring was installed to the hull side. This modified the track sit so it would not be too close to the hull side.

The support rollers were sanded smooth, and their mounting frame carefully cleaned up. The wheels snapped into place, and were glued to their stations on the hull sponsons.

The last piece of suspension dealt with was the single road wheel up front between the idler and the first bogey wheel. This one mounted directly to the sponson extensions for the idler wheel, but the fit was troublesome and took time to finally get right.

Those fender moments

The fenders are added last due to their delicate nature. The photo-etch brass sheets have sharp definition and detail that is superb. There are many different pieces needed to complete each fender. Textured tread plate segments and mounting braces are attached to a long, flat piece. The front and rear mudguards are complicated assemblies with tiny curved sides. The instructions note substi-

the photo-etch before soldering.

The tread plate sections were added first. The instructions were critical, because the segments have an orientation that needs to be followed. If not, the tool stowage will not be right. The support braces were attached next, with careful attention to alignment. The fender depends on these brackets to sit against the hull side correctly.

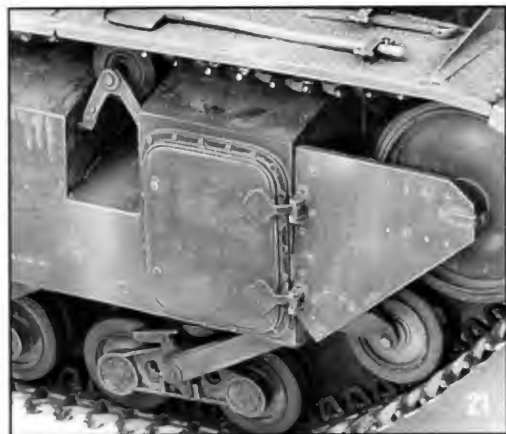
The front and rear mudguards were difficult to assemble. The flat pieces must be turned into curved pieces, and tiny fillets are affixed on the sides. Photo-etch workable hinges are used to attach the front mudguard to the fender. A triangular piece was glued to the side nearest the hull.

It wasn't until the model was completed that a mysterious "piece" was identified. Photo-etch part number 44, not mentioned in the instructions, spans the two triangular pieces on the front mudguards. Verification of this in references was not found, but the completed model on the Jadar website appears this way.

After soldering, all the parts were cleaned with lacquer thinner. Otherwise, it may cause problems with the paint later on. Gunze Sangyo Mr. Surfer 1000 primed and sealed the metal surfaces.

Final assembly

The fenders were installed after the tracks were painted and in place to avoid interference. The suspension, tracks, and lower hull up to the fender line were painted and weathered by the method described in the painting section. The tracks were draped over the suspension and the last



19. The jack and fire extinguisher are secured with photo-etch clasps. The kit's cleaning rods were replaced with ones made by Elephant. The separate fender bracing and tread plate is apparent. 20. The Balkenkreuz are from Fine Archer Transfers, the Elephant's head is a custom made decal. The dome shaped piece is the folded down headlight. The horizontal weld bead was added to cover a construction joint line, but there was one on the real vehicle. The functioning

tool clasps are also visible. 21. The road wheel between the idler and the first bogey was ill fitting. Note the fine detail to the sponsons and the weathering below the tracks. 22. The small lights have punched-foil lenses. The odd-shaped part at upper right is for the antenna to rest in when folded down. Note the resemblance the secondary turret has to the one on a Panzerkampfwagen I.

link pin inserted.

The fenders were attached with CA glue to the hull sides using included scribed lines to guide proper placement. Two springs were made from coiled wire and attached to the insides of the front mudguards. A brass rod antenna was affixed to its mount on the main turret.

The delicate tools were detached from the over pour plugs and cleaned up. They are finely cast items, especially the jack. Some slight warping was present due to their small size, but it was easily corrected by applying gentle heat. The cleaning rods were the exception, so they were replaced with a set from Elephant. Each tool clasp was assembled without glue to remain workable. They were glued in place to tiny flat spots in the fender's tread plate.

The exhaust muffler had fit problems after placing it on the fender. It was too high where it met the engine deck's armored exhaust outlet, so the outlet part was cut down slightly to correct the problem.

Painting and marking

Panzers of the mid '30s usually had base colors of dark gray with hard edge camouflage patterns of brown and/or green. By the time this vehicle was in Norway during 1940, the camouflage colors had been dropped and just the dark gray remained. Dunkelgrau, as the Germans called it, was a very dark gray, almost black.

The approach to achieving Dunkelgrau began by first spraying everything Tamiya Flat Black. Then it was sprayed with Gunze Sangyo Tire Black. Subsequent weathering would change the color dramatically.

The suspension received a light and selective over spray of Gunze Sangyo Dark Earth. This was applied to the wheel centers, bogey trucks, and lower hull. More intense dirt stains were simulated with Raw Umber colored pastel chalk dissolved in airbrush thinner, and applied with a small paintbrush. This mixture was also applied to the tracks. A thicker mixture was also dabbed on the hull sponsons just below the tracks. Highlighting was applied lightly by dry brushing with tan artist oils.

The white metal tracks were first dipped in "Blacken-It" etching solution. After two dips, the tracks were still not black, but brown. Not all the surfaces were colored, either. They were sprayed with Vallejo Model Air Burnt Umber to complete the base coat. The worn metal areas on the track and sprocket teeth were painted with Gunze Sangyo's Stainless Steel from their excellent "Mr. Metal" product line.

The German Balkenkreuz markings are from Archer Fine Transfers. A unique Elephant's head design that Nb Fz's in Norway had painted on the glacis plate was made with a computer and printed on decal paper. A quick coat of gloss was laid down to prepare the surface, and after the decal was dry it was sealed with a flat clear finish.

The weathering continued with a light spraying of a well-thinned earth brown mixture over the entire model. This helped tone down the markings and impart a dusty look. Next, Raw Umber pastel chalk and airbrush thinner were combined to make a mixture that was used as a thin wash. This was applied over the entire model, taking care to let it pool around rivets and into crevices. This complemented the previous "dusting," by taking it a step further. Highlighting with tan artist oil paint finished the desired look. Detail painting of the tools was done with Vallejo paints. The exhaust was painted with a brown pastel chalk and airbrush thinner slurry for a textured look.


Conclusion

Armo has done a superb job with this kit. The big positives are the hollow cast pieces with well-designed pour gates that easily are removed for parts cleanup. The level of detail is very high, and the parts fit together very well.

The negative aspects are the track and complicated photo-etch fenders. It is not completely necessary to replace the track, but there will be a lot



less hassle if aftermarket tracks are used. The fender design is first rate, but it requires patience and experience with the medium to avoid trouble.

Considering that complete multi-media kits are usually in the \$100 range, Armo offers a very good value for the investment. 

—John Robinson

MMiR RECCE

ARMO Neubaufahrzeug. Kit number 35026. Suggested retail \$62.00.

Friulmodellismo Panzer III/IV 36cm track (you'll need two sets). Set number ATL-02. Suggested retail for each set, \$30.00

Archer Fine Transfers German WWII Balkenkreuz mix #2. Sheet number AR35044. Suggested retail \$16.95

References

German Armored Rarities 1935-1945 by Michael Sowodny, Schiffer Publishing, Atglen, PA, 1998. ISBN: 0764303961: Photos and technical data.

Panzer Tracts 4 - Panzerkampfwagen IV by Thomas Jentz, Darlington Productions, Inc., Darlington, MD, 1998. Photos, technical details, and history. The Nb Fz was an ancestor to the Panzer IV lineage. *Panzerwaffe at War* by RPH, Concord Publications Co., Hong Kong, ST, 1997. ISBN: 962-361-618-X: Two photos.

Panzer-Division 1935-1945: (1) The Early Years 1935-1941 by Robert Michulec, Concord Publications Co., Hong Kong, 2000. ISBN: 962-361-666-X: Three photos.

How fast can a Ho-Ro?

Converting with the MR-Models Type 4 'Ho-Ro' SP Gun



The Type 4 'Ho-Ro' self-propelled Gun was the last of the SP guns developed by the Japanese during World War II. Unlike some of the earlier models of SP guns, the 'Ho-Ro' actually made it into combat in the Philippines and at least one was captured. What makes it really interesting is, although it was the last to be produced, according to a Restricted Military Intelligence Document dated May 1945, referenced below, it was the first Japanese SP gun encountered in combat. The only other confirmed Japanese self-propelled gun to see action was the Type 1 'Ho-Ni' I on Luzon in June 1945.

The 'Ho-Ro' was a conversion of the standard Type 97 early model 'Chi-Ha' tank chassis. The gun mounted on the chassis was the Type 38 150mm Howitzer. The configuration was very similar to the early SP Guns produced, except the forward shield was a little larger. Construction began in 1944 and at least 25 copies were made. The Type 38 150mm Howitzer was a license built German Krupp howitzer Model 4. There was a crew of five to six with a commander, driver, gunner and two to three loaders. The ammunition was stored both in the floor compartments and in a large box mounted on the

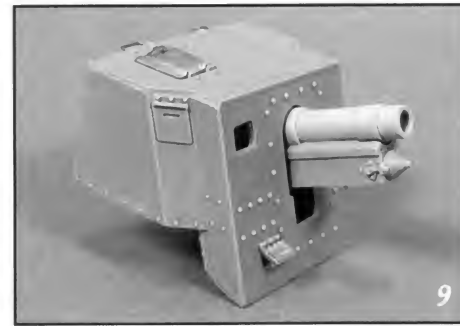
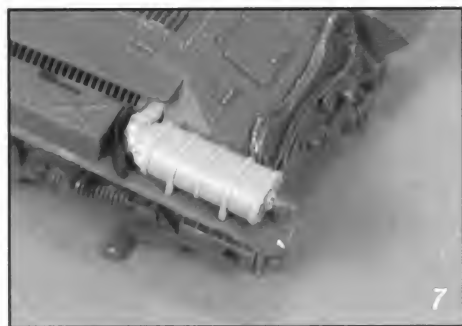
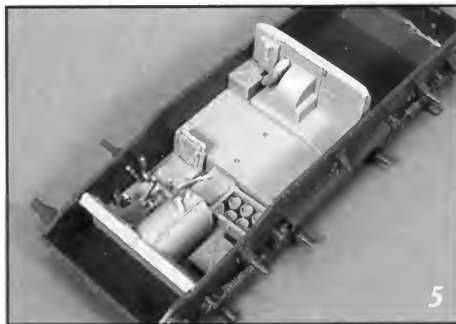
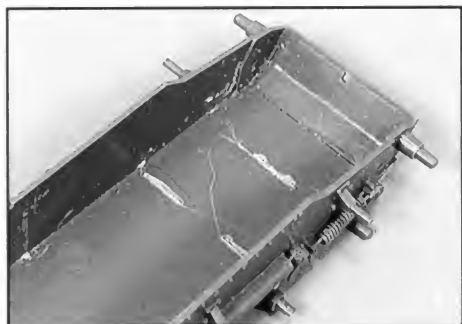
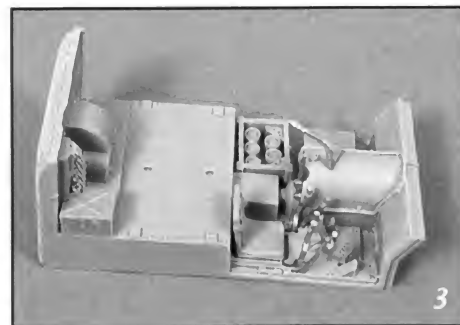
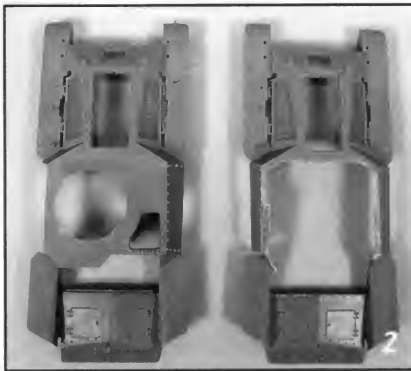
rear deck. The Type 38 used at least three different types of rounds, including HE, white phosphorous and anti-tank.

A couple of years ago, I found out through rumors on the internet that the last surviving 'Ho-Ro' was being held captive by the Marines at Quantico Marine Corps Base in Virginia. Sure enough, I called the curator of the U.S. Marine Corps Air and Ground Museum and he said yes there was just such a beast in an old warehouse. Since I live very close to Quantico, I invited myself out and met the curator who let me in to photograph it. About a year later, when my kind wife bought me a digital camera for our anniversary I had to take one more opportunity to visit the old girl (the Ho-Ro, not my wife) to take some additional photos. Unfortunately, the gun is not in great shape and is surrounded by old airplanes (blah!) and towed artillery pieces, plus it is parked right next to a door that does not open, making access difficult. I do know that the museum has plans at sometime in the future to refurbish it, but I am not sure when.

I did a little detective work and with help from my friends Taki in Japan and Albert Aindo in Manila, I have tracked an interesting history of this

particular 'Ho-Ro.' Albert had found an official US Army history book on the 38th Infantry Division at the Lopez Museum near Manila. It has a photo of a captured 'Ho-Ro,' which he sent me, with a bunch of US Army troops sitting on it. Through my friend Taki, I was able to contact Mr. Suzuki, the president of FineMolds. Mr. Suzuki said he believes that this same 'Ho-Ro' was the one captured close to Clark Field in the Philippines around March 1945. The 'Ho-Ro' captured was one of two belonging to the Sumi Independent self-propelled Gun Company of the Japanese 2nd Tank Division. Capt. Sumi commanded the company and both guns were in this same engagement. Mr. Suzuki went on to report that the 'Ho-Ro' captured was commanded by Sergeant Saito.

This is believed to be the same 'Ho-Ro' that was shipped to Aberdeen. This 'Ho-Ro' sat at Aberdeen for a number of years, but then disappeared and was reported to have been destroyed in a scrap metal drive during the Korean War. However, I recently ran into an older gentleman, Harold Johnson, a retired Marine Warrant Officer who at the time was working for the U.S. Army's Foreign Science and Technology Center. Harold said he was responsible for having this 'Ho-Ro' transferred on a



1. This is what you get in the MR Models conversion kit. The casting for the most part is fair with minimal cleanup. 2. The hardest part of the kit is cutting the hole for the superstructure. The rear of the glacis plate also requires the removal of about 1mm. 3. The hull interior is basically one piece with a few small parts added. The levers for the driver have to be glued in facing outward. 4. The raised ribs on hull bottom need to be removed or the inset will not sit low enough. 5. The inset dropped right in with a little glue. The white metal hose in the rear of the compartment was a little difficult to figure out from the vague instructions. 6. The hull top was difficult to glue

on with all the interior parts. I had to fill in a small gap at the front with sheet styrene. The ledges on the inside were put in after the top was glued on. 7. The mufflers were from the conversion kit. They use the tail pipes from the Tamiya kit. 8. The Eduard's photo-etch provided a number of neat pieces, like the shields and screens for the mufflers and mounting hardware for the tools. Additionally, the screen for the rear of the compartment only comes with the photo-etch set for the Ho-Ni SP Gun. 9. The superstructure was kept separate until the interior was painted. The gun mounts farther forward than the instructions say.

barge, along with some other armor, from Aberdeen to Quantico around 1963 in trade for some German machine guns.

I have been recently contacted by Mr. Suzuki of FineMolds regarding the possibility of having one of their personnel come over to do the necessary research to produce an injected kit of it. Unfortunately, if that does happen, I don't think it will be for a couple of years.

The kits used

This is the most extensive conversion kit by MR Models I have built. It consists of 43 resin parts cast in gray and 22 white metal parts. The kit is a pretty typical MR Model product and the quality of the castings is only marginal. There are a lot of small holes in the castings and the instructions are a little thin in places. The basic kit for the conversion is the Tamiya Type 97 early Medium Tank. The Tamiya kit is the first of the Tamiya World War II Japanese tank kits they produced but it never was motorized. Probably because it was too small. Anyway, it is still a good kit, with the usual dark green plastic with rubber band tracks. I also used an Eduard's photo-etch set for the Type I Ho-Ni SP Gun and a workable

set of tracks from ModelKasten.

Not an easy conversion

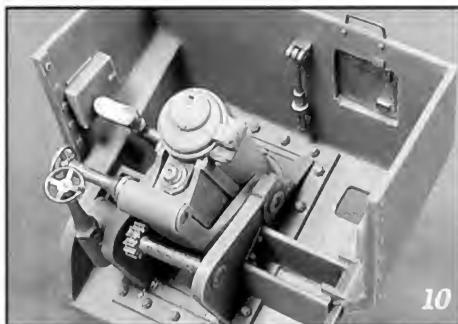
The construction began with the suspension system, which is also the place that Tamiya always starts. I cut all the roadwheels and return rollers off their sprues, then cleaned them up using an emery board. I then glued the bogie sets together.

Now the hard part of the kit, starting the conversion. I started with Step A in the MR Models' instructions. I cut the top of the hull down trying to follow the fairly vague instructions. The hardest part was the right side where there is really nothing left to support the right panel. Mine, of course, broke, but I managed to save enough to make it work. The other problem was the rear of the front glacis plate, which has to be trimmed. Before beginning the glacis plate modification, the main resin superstructure has to be cleaned up. This is because you need it to check for fit. There is a resin pour plug on the bottom that has to be cut off the superstructure. I then started cutting on the glacis by cutting a little at a time and doing a lot of dry fitting. You need to remove the under hang, then an additional 1mm from the glacis. You will need to replace

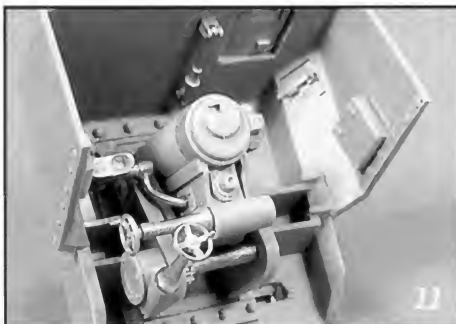
the rivets on the rear of the glacis plate, since they are removed in the cutting process. MR Models was kind enough to provide two plates of rivets for this replacement.

I now turned my attention to the interior in Step B. First I sanded off the small plug on the rear of the interior piece. The supports inside the lower hull have to be removed or the interior would not sit low enough. I then added all the detail levers and pedals. The drawings are actually okay if you know what they are showing, but I did not figure that out until I looked at my photos of the Quantico 'Ho-Ro'. This is mainly for parts 5 and 6, which need to face out as drawn. If you use the Eduard's photo-etch set for the 'Ho-Ni', there are two screens provided that go inside the compartment. Once all the small parts were on, I glued the plug-in into the hull bottom.

I then returned to step A to complete the top for fitting. There are two fillets, 17 L and R, that go into the sides. I had a hard time figuring out how they fit, but I finally got them in. There are some seats that go on them that are not numbered but are in the kit. Since they are extendible seats, it is up to you how you want them mounted. I waited since I had not at this time decided where my crew was going to be. I



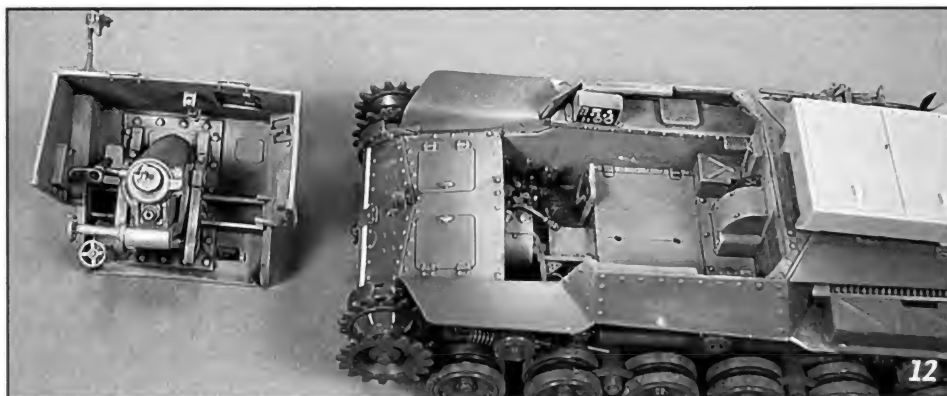
10



11



13



12



14

10. The small boxes on both sides are not mentioned in the instructions but there are mount points. 11. The travel lock is mounted on the roof or you can have it hang down and lock to the breech. 12. The interior was sprayed with Tamiya desert yellow, then the details were painted using Vallejo acrylic metallic paints. The advantage of these paints is you can use a mineral

sprit wash without the paints running. 13. The superstructure and rear ammunition box were glued on. The workable ModelKasten tracks were tested for fit before painting. 14. I almost missed these parts. The long rod and short case were not included in the kit, but show up on photos of the Ho-Ro in Japan.

eventually glued them in the retracted position.

I now glued the hull top on. This was difficult because of all the resin pieces and I ended up with a slight gap in the front, which was filled with a piece of styrene. There was a lot of filling required which normally would not have been a problem. I always fill all the holes in the fenders, since I like to have the bottoms of the fenders smooth. I then cleaned up the resin mufflers and glued them on. I also mounted all the tools on the right fender since that is how the 'Ho-Ro' at Quantico had them mounted. Although missing from the Quantico 'Ho-Ro,' the toolbox on the left fender is in other photos.

Adding that big gun

The gun was the next step and it proved pretty easy. I first cleaned up all the parts and removed the pour plugs. I then glued the barrel to the breech recoil system. The mount for the recoil, part 28, was then glued to the barrel and recoil assembly. Be careful here because the recommended mount is wrong. Instead of the recommended 22mm, you need to move it 30mm to the rear. Otherwise, the gun sits too far back. The rest of the mounting was pretty straight forward, but you will probably feel an extra set of hands would help.

The only other thing I had difficulty with was figuring out where the travel lock went. There are two mount points on the ceiling of the superstructure where two very small white metal mounts go. The travel lock sits in these two mounts or one end can be attached to the breech if you want it locked. Oddly, the travel lock on the 'Ho-Ro' I photographed at Quantico is on the left side of the gun, while the kit one is on the right.

There are also two small boxes, parts 21, that go inside the shield. These only have places marked but not covered in the instructions. There are also two parts, 18, called 'bolt rails' and I have no idea

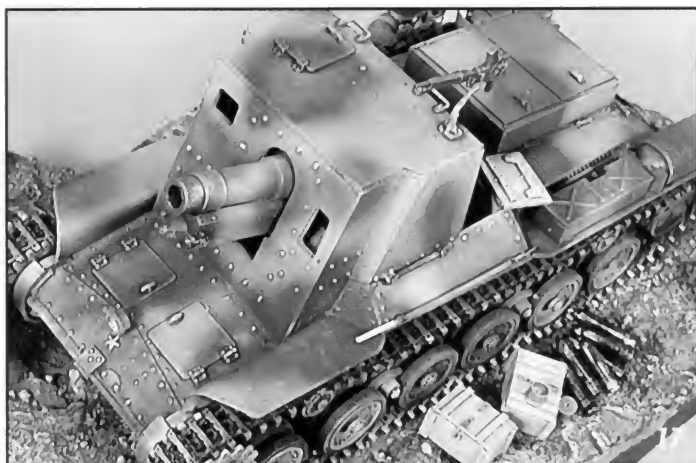
where they went. I finally left them out. In the instructions there is a reference to using parts B1-B3 from the Tamiya kit on the roof. I assume they meant B1 and B2, which are the 7.7mm machine gun and its mount. I did not notice this mount at first since the one at Quantico does not have it. On closer examination however, there is a spot on the roof that could have had this mount welded on. In some of the other photos of different 'Ho-Ro's, you can clearly see the base for this machine gun mount.

Tracking along

The ModelKasten workable tracks are a lot of work, but by far the best available for this common Japanese chassis. They have separate horns, which take extra time, but look much better than the solid ones. I assembled the links 10 links at a time and then assembled all sections together. They required 96 links per side to get the correct sag. The one trick I use while assembling the links is to push the pins into the links with the blunt end of a drill bit. This not only makes the connection better, it also



The machine gun mount can also be seen in the photos of the gun after its capture.



15. The vignette is depicting the time of capture of the Ho-Ro by the 38th Infantry Division close to Clark Field. The completed vignette base was made with sheet styrofoam, which was covered with tile grout and Cellucloy. 16. The screens for the mufflers came from the Eduard's photo-etch set. The taillight was replaced with a MV red lens. 17. Artistic license was taken to use the camouflage paint. Most of the photos seem to show it in a monotone color but I am not sure if it was khaki or green. The MR Models kit included a number of rounds and ammunition boxes.

reflects the recessed hole of the real links.

There were two things missing from the kit that I almost missed. I noticed in a couple of photos that there were two items on the left side of the chassis. One item is what I believe to be a survey rod for laying the gun and the other appears to be a case of some type. Both are clearly shown on the one photo I have seen of a 'Ho-Ro,' which appears to be a factory fresh model. I found an item in my spares box that resembled the case and made the survey rod out of a piece of styrene rod.

To camouflage or not

The first big question: was the 'Ho-Ro' painted in the normal colors that the Japanese appeared to paint all their other tanks and self-propelled guns? The MR Models instructions had a large section of instructions, which they failed to translate into English but I was able to read one part about the use of camouflage colors. The problem is there are only three photos I could find of the 'Ho-Ro' before it was brought back to the US and the quality was pretty poor. The one factory fresh vehicle is clearly not camouflaged and the others I could not tell. Anyway, I decided to take some artistic license and go for the camouflage, since I think it looks neater and most Japanese armor was actually painted in camouflage colors.

I painted the interior first, before gluing the superstructure on. MR Models does say to paint the interior white, but I do not believe the open self-propelled guns like this one were painted this color. I decided to paint the interior with desert yellow, the base color of most Japanese tanks late in the war. After washing everything, I sprayed the interior with Tamiya XF-59 desert yellow. I then hand painted the instrument panels and the steering handles. The whole thing was then given a wash of very thin black oil paint. I then dry brushed with

titanium and yellow ochre and Rub-n-Buff silver. The superstructure was then glued on and the interior was stuffed with cotton. I then sprayed the whole vehicle with Tamiya XF-59 desert yellow. I then sprayed on a camouflaged pattern using Tamiya XF-64 red brown and Tamiya XF-13 JA green. The small items like tools were painted with Vallejo paints and then the rear license plate decal from the Type 97 kit was put on. Next, I then sprayed a semi-gloss acrylic paint to seal the gun. I gave the gun a wash of very thin black oil paint, then followed up with spot washes of black and burnt umber oil in selected areas. I then dry brushed with titanium white, sap green, yellow ochre and raw umber oils. The silver parts like the tools and machine gun were brushed with Rub-n-Buff silver.

Capturing an SP gun

I debated a long time about how to represent this gun, but finally was drawn to the photo I had of its capture in the Philippines. I decided to depict a group of GI's moving past the gun when it was first captured. There were two reasons for this decision.

The main one was I have just plain run out of decent Japanese figures that I have not already used at least twice on other vehicles. Additionally, I did not want anything inside the fighting compartment blocking the view of that super neat interior. I therefore chose the new DML set of GI's in the Pusan Perimeter set since the uniforms are the perfect summer weight, just like the ones in the photo of the captured 'Ho-Ro.' I painted them with a combination of oils and Vallejo paints.

This was not easy, guys

This is definitely not a conversion for the beginner. As a matter of fact, it will task even the experienced conversionist (is that a word?). Having said that, I highly recommend this kit for those of you who love old Japanese guns. What does continue to amaze me is where MR Models gets their information. They obviously saw a real one somewhere, but I don't think it was the one at Quantico since there are some subtle differences, like the travel lock being on a different side and the hatch on the top of the structure. The price is another attractive feature, since the conversion is very cheap, considering what you get. ☺

—Jim Hensley

MMiR RECCE

Tamiya Type 97 Medium Tank. Kit number 35075. Suggested retail price \$13.32.

MR Models Japanese self-propelled 15cm howitzer Type 1 Ho-Ro conversion. Suggested retail price \$28.00.

Eduard photo-etch set for Type 1 SPG Ho-No. Kit number ED35096 Suggested retail price \$20.99. Kit graciously provided by the manufacturer.

ModelKasten Type 97 working track links. Kit number SK-31. Suggested retail price \$43.95.

References

Japanese Combat Vehicles of W.W. II, Ground Power No. 30, Tokyo, Japan, 1996.

Taki, *Type 4 SPH 'Ho-Ro'*, Taki's Homepage, <http://member.nifty.ne.jp/takixxx/>

U.S. Army 38th Infantry Division History, Peyton Hoge Publishers, US, 1947. Good photos of the captured 'Ho-Ro' but no description of the actual capture.

Tactical and Technical Trends, Number 38, May 1945, Military Intelligence Division, War Department, Washington D.C. First technical description of 'Ho-Ro'.



This vehicle is currently in storage at the U.S. Marine Air and Ground Museum at Quantico, VA and not accessible to the general public. A) Notice how much of the rear strap on the barrel comes through the shield. This is a good guide to where to mount the kit barrel on the recoil assembly. B) The main shield looks heavy and the open ports are dif-



ferent on both sides. C) Not sure where this flag came from but it is probably wrong. Normally only the Japanese Naval forces used the rising sun flag on their vehicles and all the 'Ho-Ro's belong to the Army. D) The breech is open and I doubt it will ever close again. The general layout of the fighting compartment can be seen here. The driver is on the right and forward. The gunner would be on the left. E) The metal bar running top to bottom is the travel lock. The kit's



travel lock is mounted on the other side. F) Looking through the port hole above the driver's station. I have seen no indication that this hole had a cover which would make it very inviting for someone shooting from the front. G) Details of the inside of the ammunition storage bin showing the wooden block used to keep the rounds from rolling around. H) The mounts for the shovel, jack, and pick plus the breaker bar are all present on the right fender. This is the same configuration as the Type 97 'Chi-Ha' early model. I) An overhead view of the rear ammunition storage bin. This one is metal but they could also be built out of wood. The kit gives you the option of which one you want.



A peek at what's new on the figure front!

MiniMen

Alpha Image Inc. Model Workshop

This is a brand new line produced by none other than Vincent Wai, the renowned military artist. If you don't recognize the name, you will recognize his many illustrations adorning the covers of DML tank kits. There are five dudes in the initial line-up and here they are.

W35001, British tank crew in pixie suit, WWII (No.1)(1). this tanker is having a bite to eat with his plate and spoon. The tan heavyweight cotton over suit, also known as a pixie suit, is being worn. The pistol is held in the pattern 37 pistol case with 12 round cartridge pouch.

W35002, British tank crew in denim tank suit, WWII (No.2)(2), here, the denim tank suit is worn with the left side being worn off the shoulder, exposing the pullover shirt, wool trousers and suspenders to nice effect.

W35003, British tank crew in pixie suit, WWII (No.3)(3), although he's not doing much, this tanker also has on the "pixie suit" and carries the pattern 37 pistol case with cartridge case.

W35004, British tank crew in pixie suit, WWII (No.4)(4), this tanker is in a kneeling pose and has a pixie suit and side arm as the tankers above.

W35005, British tank crew, WWII (No.5)(5), The tanker leaning over and pointing as if working with the above-mentioned tanker. The standard battle dress uniform in brown wool and leather jerkin and anklets.



Commander Series Models, Inc.

3-02, German Medic 120mm (6a,b), is a big 'un. Big, in terms of scale, that is. This is the first of what may become a series from Commander. As the name states, this is a medic and he wears the M1943 field cap up top with a balaklava around the head and neck. His field gray great coat and field gray trousers are worn with anklets and short leather boots. True to his profession, he sports the M1943 medical pack with a Zeltbahn wrapped around it. Being carried on his belt and Y straps are two dismounted medical pouches, a breadbasket, canteen, entrenching tool and a refreshment flask often used by medical personnel. A white medical apron with a Red Cross is being worn over the great coat. Wool knit gloves with over mittens are hanging from his belt.

This is a pretty nice figure and it should go nicely with other new figures in this scale.



Custom Dioramics

CD 4030, "Atten-Shun" Part #1, Gen. Patton, Driver & Crewman WWII (3 Figures) (7), is a multi figure set creating an instant scene in the location of your choice. The most prominent of the three is General Patton himself. He wears three stars this time and the officer's field overcoat, brown wool trousers and a pair of M1943 combat boots.

The mechanic snapping

off a crisp one has Patton's most hated issued item on his head, the M1941 wool knit cap. The jacket is the winter combat jacket and he wears it with the brown wool trousers and M1943 combat boots. He has a small hammer in his left hand.

The driver figure wears an M1941 jacket, a pistol belt with a .45, first aid pouch and an ammo case for the .45. Brown wool trousers and 1938 dismounted leggings round him out.

CD 4031, "Atten-Shun" Part #2, US Tank Recovery Crew WWII (2 Figures) (8), is designed to go along with the above listed set. They sort of represent the background of the scene. The standing figure wears the HBT work suit and cap with leggings over boots. He is writing or painting on the side of something. The leaning soldier has a knit cap on over the uniform and a pair of winter combat trousers.

CD 4034, Polizei, German WWII Policeman (9), is one of those "how come no one ever thought of" pieces. He is decked out in the standard uniform of a municipal policeman. This is a very military looking uniform that dates back to the Imperial Feldjäger. This uniform is accompanied by a distinctive helmet, which gives the figure an even more military bearing. This uniform is very similar to the one worn by German MPs during the Polish campaign.

The figure is holding a small booklet in his left hand and this is, no doubt, a Soldbuch. The Soldbuch is a German soldier's "papers" and he literally wouldn't be caught dead without one. There was also a civilian version of the book and this could broaden the use of the figure. Cool subject.





figures. With all the anti-aircraft guns and accessories now available, we think (like anyone cares) it would be awesome to crew them exclusively with babes.

Dragon

6163, U.S. 101st Airborne Division (Bastogne 1944) (11), is a group of eagles wearing a mix of uniforms, so let's look at them as a group. Two of them wear the enlisted man's wool overcoat. The kneeling rifleman has the M1943 field jacket. The last jacket being worn is a mackinaw, maybe a first pattern type. All four have wool scarves and leather gloves. They all wear the HBT trousers and rubber over shoes, which are executed beautifully in plastic. The equipment is the standard issue webbing with ammo pouches for M1 or BARs, bayonet, canteen, shovel and a pistol.



This is a first rate set and the sculpting and execution of the Dragon sets just keeps getting better and better. With that and that fantastic Volstad artwork, we're in hog heaven every time a new set gets released.

Lincoln County Line

As we mentioned in the Short Takes sections, the Lincoln County Line is a series of figures that meet a slightly lower price point and are somewhat simpler sculptures. These are the first of what we expect to be many releases from them.

LC 0002, German Mountain Trooper '39-45 (12), wears an M1943 field gray cap with a M1938 Mountain Troop reversible field gray/white anorak with three chest pockets. Field gray trousers and a pair of brown leather mountain shoes round out the ensemble. Fashionable accessories include a black leather belt and pistol.

LC 0003, Italian Tanker WWII (13), depicts the Italian tank uniform which was patterned after the French with the crash helmet, overalls and three quarter length leather jacket. Interestingly, the bandoleer worn was only issued to mounted or motorized troops.

LC 0004, Soviet VDV Assault Trooper Firing SA-7 (14), is a modern type with all the latest body armor and other gear. He is hefting a SA-7 skyward and he is, obviously, up to no good.

LC 0005, "The Rescuer," Mini-Vignette (Soviet WWII) (15a, b), gives us a wedgie—a wedgie tank, that is. In this vignette you get two Russians and a nice partial rendering of a KV-II turret. You have a Russian medic pulling a wounded comrade out of the top hatch. Both wear the standard gymnastiorka blouse and trousers. The "puller" has a medical bag over his shoulder.

Michael Roberts, Ltd.

54-006, Private 101st Airborne The Ardennes (54mm) (16), is yet another great 54mm Screaming Eagle from Michael Roberts. This one is a private in the Ardennes with a bazooka and he's about to give some one a nasty surprise! A choice of two left arms is provided and we chose the arm with the universal sign for shut the F-up! The uniform is the model 1943 field jacket with the HBT trousers. A knitted wool cap is worn underneath the helmet. Black leather gloves. Pistol belt with .45 and cartridge pouch, canteen and shovel. Rubber overshoes round out this fantastic sculpted figure.

Modeling Artisan Mori

Because we started reviewing these figures only recently, we are taking this opportunity to play a bit of "catch-up." Here is a peek at some of their earlier releases.

MB001, British Tankman, looking up the sky (in Africa) (17), as described the Brit here looks skyward and he's decked out in the typical desert dress of shirt, shorts, socks and short puttees.



CD 4035, German Army Female Auxiliary (10), is another cool and unusual subject. After a certain point in the war, the Germans really stepped up their use of female auxiliaries in non-combat positions, especially in anti-aircraft support. This figure is a basic chick taking a stroll and her uniform is somewhat generic. Both the Wehrmacht and the Luftwaffe used a similar skirt and jacket combo and both issued a smaller version of the overseas cap with the appropriate insignia.

We joke around about it a lot, but we would love to see more of these types of

MG003, German SS Tankman For Panther Type G (18), depicts two German tankers, one half and one full figure. The commander has his arms resting on the turret ring to nice effect. He wears the camo tanker's uniform with the soft peaked cap. The gunner is sitting in the rear hatch holding on to the grab handle. He wears the camo tanker's uniform with 1943 pattern cap.

MG008, German Tank Commander "Panzer Vor!" (19), depicts a tank commander giving the "let's get going" signal. He's decked out in the black panzer wrap, worn with 1943 pattern field cap. He's another great "hatch rat" that would work equally well in a tank or a StuG.

MG009, German Kübelwagen Driver, wearing poncho. (20), is a driver figure wearing his Zeltbahn over his field gray uniform. His helmet has netting or chicken wire over it, so foliage can be attached for additional camo. Anklets are being worn, along with a pistol belt and suspenders.

S&T Products

STP 16010, "The Chosin Few, " 1st Marine Division Chosin Reservoir Korea 1950 (21a, b, c), are another example of the great work that S&T has been doing in the 1/16th range. If you like the hard charging, never-say-die story of the 1st Marine Division at the Chosin Reservoir, then these guys are for you. S&T has rendered three different figures and composed them on a wonderfully executed base for a stunning effect.

The two Marines are all ready for the cold. The clothing would be worn like this and or modified to what was most comfortable and warm for the individual. The first layer was long underwear of a cotton wool blend and subsequent layers consisted of two pairs of wool socks worn over the regular socks, flannel shirt, wool trousers, pile cap, sweater and shoe-pacs. Add to that the combat field trousers with suspenders, wool scarf, pile field jacket liner, (an infantryman's favorite thing), field jacket, mitten inserts, helmet with camo cover, field jacket hood, parka overcoat with liner and trigger finger mittens, and you've got yourself a Marine!

Both figures reflect all this gear in their sculpting. They also carry the standard pistol belt with canteen, bayonet and ammo pouches for their personal weapon (in this case, an M1 and Bar). The distinct Marine first-aid pouch and K-Bar is also present. Wow! This is some detail fest.

Our unfortunate Chinese friend is decked out with the Soviet style khaki pile cap padded jacket and trousers. He's armed with a PPSh-41 submachine gun, pistol belt with drum ammo pouch and Soviet style F1 grenade.

Weird combat anecdote about the Chinese: One battalion that was attempting to flank the Marines at Chosin was forced to double-time it for two or three miles and when they arrived at their jumping off point, they were immediately told to get some rest. With no bedrolls or other sleeping gear, they threw themselves on the ground and were all fast asleep in minutes. However, their cotton pile uniforms were soaked with sweat and they all died slumbering in the sub-zero temperatures.

Is your big Tamiya Tiger lonely? S&T has cooked up some company in the form of **STP 16013, SS Tiger Crew, Battle of Kharkov, (22a, b)**. This is a two-figure set that is especially designed to mount that 1/16th scale monster. As the name suggests, these guys are decked out circa 1943 and they both wear the SS "winter combination" overall, which was first introduced at Kharkov. The sculpting on the overall is appropriately frumpy looking



and both the figures have that "what the hell are you looking at?" attitude. The commander comes with a choice of left arms, one down by his side or one resting on the cupola, in case you want to pose him outside. Both these dudes are available as

separate miniatures. The Commander is number 16014 and the Loader is number 16015. We're hearing rumors about more mini-dudes to party on your Tiger and we'll let you know as soon as we do!



Warriors

Like the mail, figures from Warriors just keep coming and coming. No complaints here! First up is **WA 35433, USMC LVT-(A) 1 Crew (24)**. In this set, there are two full figures and one half figure. All three have on the two piece dungarees and gaiters over the brown leather boots. The helmets have the camo covers on there. It's safe to say that the commander figure would have the same uniform all the way down. This is as timely as today's headlines (or at least our headlines in this issue—see the LVT feature on page 38).

WA 35434, Russian POW Set #2 (25), is a two-figure set with a dejected looking Russian and a German searching him. The German is wearing a field gray jacket and trousers with a black leather belt, ammunition pouches, breadbasket, mess tin, and canteen. He's armed with a K98K rifle.

WA 35435, "Normandy," "Mini-Vignette, Screamin' Eagles, (3 Figures) (26), depicts two Eagles who have come across a wounded Fallschirmjäger in the corner of a destroyed building. The Fallschirmjäger wears a camo jump smock and field gray trousers. The boots are the black front lacing boots. The Eagles both wear the M1942 parachute jumper's coat and trousers and Corcoran jump boots. The kneeling guy has the airborne first aid pouch on his helmet with netting that contains cloth or canvas used to break up the outline. Two cotton bandoleers are worn over the suspenders and on the pistol belt are mounted M1 ammo pouches, canteen with M1943 e-tool and M3 fighting knife. He's armed with an M1 grand.

The standing eagle has netted helmet cover. The pistol belt has BAR ammo pouches, canteen, M3 fighting knife, first aid pouch and a M1928 e-tool. Both have M1936 musette bags on their backs.

The base for all three is nicely sculpted and requires only minor assembly.

Here's one for you Pacific nuts out there. **WA 35437, WWII Japanese Infantry Set #1 (27)**, marks the release of two Japanese Infantrymen sets. In this case they are depicted walking with their rifles over their shoulders. Both have on the Khaki cotton drill uniform with puttees and



Tamiya

Tamiya continues its recent figure trend with **35253, German Panzer Division "Frontline Reconnaissance Team" four figure set. (23)**. We start with the driver. He wears the forage cap in field gray, a reversible parka, field gray trousers and leather boots. The officer seated next to the driver has a feldmütze, a camo smock over the field gray jacket and trousers, and black leather jackboots, along with a pistol belt with pistol.

The standing tanker is topped with a black forage cap. He wears the tankers black leather jacket and trousers with leather boots, belt with pistol and brown leather map case. The grenadier has a camo smock and helmet to match. A balaklava is worn around his head and neck. Underneath he has a field gray jacket and trousers with black leather jackboots. The belt and Y straps hold MP44 ammo pouches, breadbasket, canteen and an entrenching tool. A stick grenade is slipped into his belt. He's armed with an MP44 slung over the left shoulder. The sling is molded into the hand and also onto the shoulder.

A pretty sterling effort from our buddies at Tamiya.



boots. They each have two 30 round ammo pouches in front and one 60 round pouch in back, along with a gas mask bag, canteen and mess tin. Both have their helmets slung on their backs and carry the standard 6.5mm Arisaka rifle.

They would look great strolling along beside your latest FineMolds purchase.

WA 35438, Schwimmwagen Crew in Winter Dress, 1943-1945, (3 Figures) (28), is another three figure set of guys out for a ride. The driver is wearing a camo pattern field cap and great coat. On the belt is a pistol and MP40 ammo pouch. The passenger wears a Feldmutze with the stiffener removed, a scarf around the neck, a reversible parka with over white pants and leather boots. The rider in back has a winter cap lined with rabbit fur with the sides down. The anorak has the large hood. The belt has a brown leather map case, pistol and a stick grenade. From the waist down is a pair of field gray winter trousers, low cut boots and anklets. He also holds a pair of field glasses.

WA 35439, Fallschirmjäger, Advancing with Rifle at Ready (29), depicts a Para with a splinter pattern jump smock and a helmet cover to match. He wears jump trousers in field gray and black leather jump boots that are front lacing. Rounding out the ensemble is a black leather belt, straps, ammo pouches, breadbasket and canteen. He's armed with a K98K rifle.

WA 35440, Waffen SS Officer, Sitting, Ideal for Tank or Other Vehicle (30) is just as the name describes. This SS officer wears a M1943 field cap, a camo smock over his field gray jacket and trousers. He accessorizes with black leather jack boots, leather belt and pistol.

WA 35442, Waffen SS Grenadier, Sitting on Vehicle #1 (31), depicts a grenadier who could be used on the back of any vehicle. He wears a camo smock over the field gray uniform with black leather belt and cartridge case with anklets.

WA 35443, Waffen RSO Crew, Wearing Camo Smocks (32), is the newest RSO crew from Warriors and is of an SS type this time around. Both dudes wear camo smocks over their field gray uniforms. The officer has the soft peaked cap, while the driver has a pattern 1943 field cap. Both have black leather jackboots.

WA 35444, Wounded Fallschirmjäger (33), is the Fallschirmjäger right out of the "Screamin' Eagles" vignette (WA35435). If you liked him there, you can get him without all the other stuff.

WA 35445, "Green Devils" Vignette (34), has three figures and a building front. You get three Para figures firing while on the move. One is WA35439, described earlier. The other dudes have on the splinter pattern jump smock with helmet covers and jump trousers in field gray. Both sport black leather front lacing boots, pistol belts with standard kit. One humps an MP-44 and the other a FG 42.



The respective manufacturers submit all samples for Mini-Men. The exception this time is Mission Models, who submitted Modeling Artisan Mori. They are the U.S. distributor for that line.

The Model Citizen

WWII German Greatcoats, part two of two

We're back! Sorry for the delay; this is the second half of the feature that began in Issue 26, focusing on

the many variations of the German greatcoat in World War Two. So go get 26 and we'll wait right here. Really.



Figure 6: Leather Overcoat for Officers (Luftwaffe)

Andrea figure #S5-F36 (German Paratroop Officer), sculpted by Raul Latorre

German officers were permitted to privately purchase fine grain leather overcoats. The Ledermantel was manufactured in gray-green for Wehrmacht and Waffen-SS, blue-gray for Luftwaffe and dark blue-gray for Navy, though many officers of all branches appear to have favored black. Only shoulder boards were worn on the leather overcoat; collar insignia was not allowed. The cut and pattern was identical to the issue overcoat for officers with the exception of a horizontal seam around the waist.

This Hauptmann of a Fallschirmjäger unit wears the Luftwaffe officer's summer Schirmmütze, made of white cloth with an unpiped crown. His captain's rank is identifiable by the two pips on his shoulder boards, edged in the golden ochre of paratroop units. His belt has the open-faced buckle and holster for his P08 9mm pistol.

Figure 7: Greatcoat Lined with Fur (SS)

Warriors figure from #35280 (German Defenders Stalingrad) sculpted by Brian Stewart, with Hornet head sculpted by Roger Saunders from #HGH8

The bitter cold of the eastern front demanded many modifications to the existing German uniform inventory. One such measure was the addition of a fur or sheepskin lining to the standard greatcoat. The lining often extended to the complete interior of the lapels and collar, which could be folded up for added protection against the elements.

This SS-Sturmabführer is preparing to fire a Walther signal pistol. His collar insignia is barely visible, but his shoulder boards edged in red Waffenfarbe identify him as a major in an artillery unit. His headgear is the Schirmmütze with officer's cords removed and SS insignia. His belt features the open-faced buckle, holster for Belgian FN 9mm Browning Model 1935 pistol, M1935 dispatch case and two M1924 stick grenades. He wears the Knight's Cross at his throat.



Figure 8: Animal Skin Greatcoat

animal skin greatcoat. A wide variety of such garments were created in an assortment of styles and colors, featuring animal hide exterior with the fur turned inward. They are commonly identified by their bulky cut and fasteners made of cloth, wood, or leather. The unique style made this coat popular among officers, though they were designed to protect sentries, drivers and field policemen whose duties put them in a stationary position.

With the insignia invisible, this soldier's rank and branch cannot be discerned. Beneath his whitewashed steel helmet he wears a toque wrapped around his head and neck. The arm bands were worn as a security measure to help differentiate heavily clothed and camouflaged troops from the Soviets. His specialized boots are leather with felt uppers and wooden soles. His mittens are from the reversible camouflage suit and are themselves reversible, worn here white side out. The separate trigger finger was introduced in the last year of the war and was copied from U.S. mittens. He is armed with a Soviet SVT 40 rifle, from Dragon #3815.

Verlinden figure #403 (German Sentry Ukraine)

Another Eastern front innovation was the



Figure 9: Motorcyclists' Waterproof Coat (Wehrmacht)

CMD/Yoshi figure #G-01 (German Motorcyclist), sculpted by Horano Yoshi

The Kradmantel was a popular and efficient garment most commonly associated with motorcycle troops. The coat was of olive green cotton twill coated with rubber and featuring waterproof seams and a cloth collar. The lower skirt could be buttoned around the soldier's legs when riding a motorcycle. There was no official insignia but shoulder boards were often attached. The coat featured a half-cape across the shoulder blades and a half-belt at the rear. Two pairs of buttons on the chest secured the lapels open or closed and just below the waist a small flap secured the coat at the wearer's right hip. The cuffs were adjustable with two different buttons. The Kradmantel featured

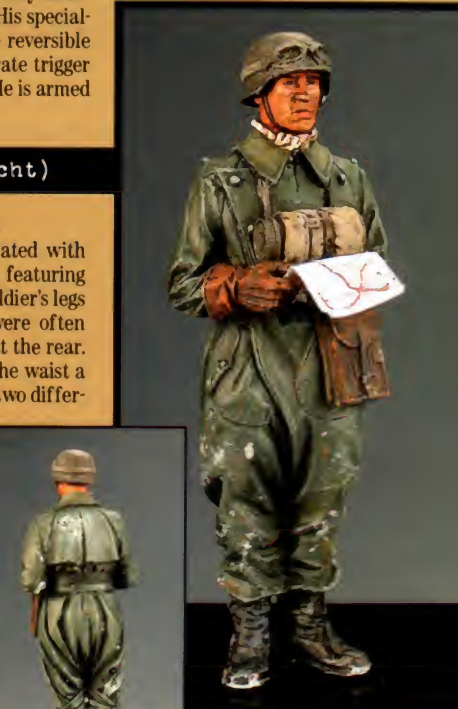
two large rounded pockets on the front, with exterior stitching on both. Hidden beneath the breast flap is a vertical pocket on the right side.

This soldier's rank cannot be determined but his belt buckle identifies him as Wehrmacht. He wears the oversized leather gloves for dispatch riders and Windschutzbrille goggles with elasticized canvas strap. His M1930 gas mask case with gas cape pouch is slung around his neck and he carries an M1935 dispatch case on his belt.

At least three other styles of overcoat have been identified and their proven existence in photographs qualifies them for inclusion here:

- A tropical motorcyclist's overcoat was made in the same pattern as the rubberized version, but in canvas cloth. Used in North Africa and the southern theater, the canvas Kradmantel appeared in buff and olive green.
- A sentry's übermantel was a larger version of the greatcoat, similar in style and worn over the standard greatcoat. It was heavily lined with fur or wool and often had a hood stitched inside the collar. Its length identifies it, as the bottom edge of this "super coat" extended down to just above the toes of the boots.
- A rubberized greatcoat was manufactured in the same style as the standard greatcoat, but of a thin twill material treated to waterproof the garment. This raincoat had a much sleeker look than the greatcoat.

Collectors interested in purchasing these and other finished miniatures can contact jporter@cosmicbovine.com



Hey, Abbott!

**Taking a bite
of the new mini
SPG from
Accurate Armour**



The Abbot is loosely based on the FV432 APC (Trojan), Great Britain's stalwart equivalent to the United States M-113 APC. The basic FV432 was developed in the late 1950s by the Sankey Company, now GKN Defense. The FV432, like the M113, was produced in numerous variants, including our subject, the Abbot FV433. The Abbot itself was developed in the mid 1960's by Vickers Defense for the Royal Artillery. Though not a conversion of the FV432, the Abbot shares many of its suspension and automotive components. The Abbot never saw combat, but served with the Royal Artillery from the late 1960s to the early 1990s when it was phased out by the AS90.

The Abbot sports a 105mm main armament in a fully enclosed turret with power traverse. The 105mm can fire a variety of different shot to a range of 17,000 meters. The Abbot is manned by a crew of four, the commander, gunner, loader and driver. A flotation screen is carried collapsed around the top of the vehicle and can be erected in 15 minutes to a 1/2 hour, allowing the Abbot to cross rivers and lakes using its tracks for propulsion. The Abbot is powered by a Rolls Royce multi-fueled K60 Mk 4G 6-cylinder engine and includes night vision,

automatic fire detection/extinguishing and full NBC filtration.

The only variant of the Abbot is the Valued Engineered Abbot, which is basically a stripped down vehicle for export sales. The V/E Abbot is a modification that looks the same externally but has a diesel engine instead of the multi-fueled engine. An anti-aircraft MG was added to the commander's cupola. Night vision, NBC equipment and the fire suppression systems are omitted. Most V/E Abbots were sold to India and Canada, with a few being sold to the British Army for training purposes in the United States and Canada.

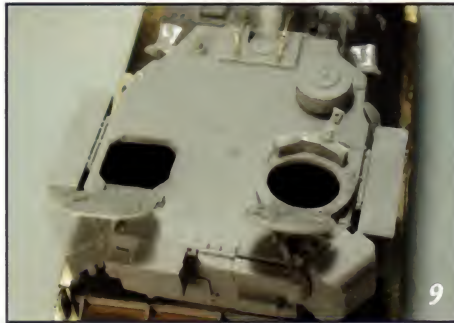
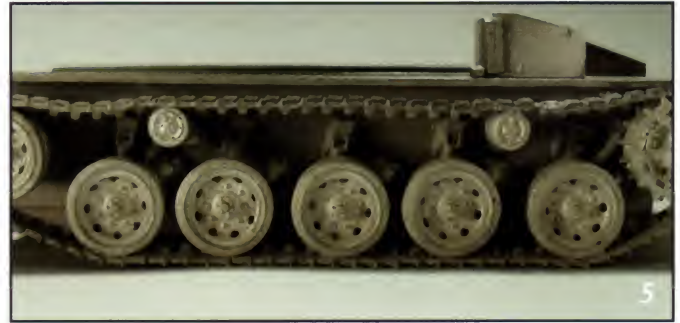
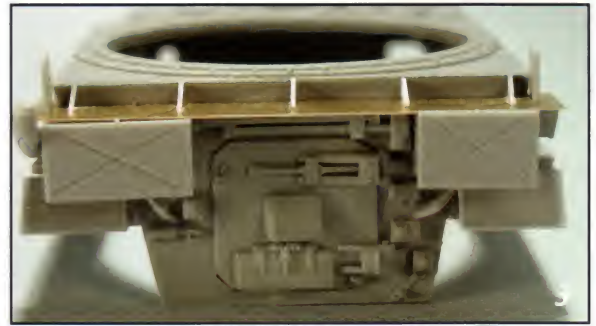
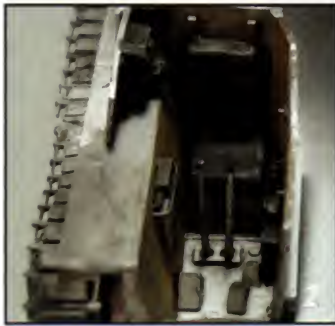
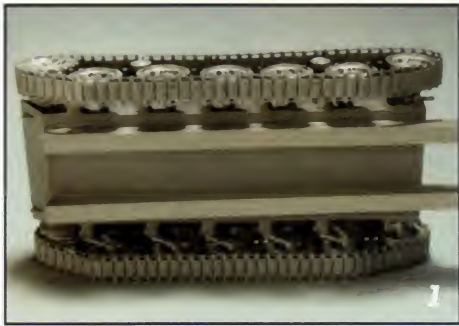
Who's on first?

The Accurate Armour kit was mastered by Jon Bottomley and really shows his skill as a master pattern maker. I was privileged to see the in progress photo's of his work as it came together. Needless to say, I was very excited about getting my hands on this lovely box of bits. The kit is a multimedia extravaganza packaged to the high standards we have come to expect from Accurate Armour. The bulk of the kit is resin with the wheels and running gear in white metal. Included are a comprehensive sheet of photo-etched brass, a par-

tial driver's compartment, decals, brass rod and a pretty good instruction booklet. Our sample was an early run so there were some snafu's in the instructions, which have since been corrected.

As far as resin kits go this is a very smooth build. It would be a good kit for someone transitioning into tracked resin models. Construction starts with the running gear. After a minimal clean up of the upper and lower hull, the two halves were test fitted before getting down to business. I glued two lengths of 3/8" (approx. 10mm) plastic I beam to the bottom of the hull to act as a spacer for setting the ride height. The metal wheels were assembled and the swing arms attached. Before adding the wheel assemblies, I attached all the bump stops, return rollers and mounts, idler mounts, shock absorbers and the drive housings.

With the model sitting on a flat surface, the road wheel subassemblies were added using super glue and a dab of accelerator to speed up the process. The mounts for the swing arms are a little on the skimpy side, so after all the wheel subs were attached I flipped the model over and added a drop of glue to each swing arm attachment point for added strength. The tracks required very little in the way of clean up and were attached using the



1. I glued two lengths of 3/8" (approx. 10mm) plastic I beam to the bottom of the hull to act as a spacer for setting the ride height. 2. Before joining the upper and lower hull, the driver's compartment had to be dealt with. This is a very simple interior consisting of three side panels and some interior bits. 3. Before adding the details to the rear you must first start with the rear flotation extension rail. 4. It is advisable to test fit the upper hull to insure that there are no gaps between the top of the panels and the upper hull. 5. The tracks required very little in the way of clean up and were attached using the boiling water method. 6. The hardest part of the kit is the bending and placement of the side flotation screens. I annealed them as usual, but this did not weaken the surface hardness enough to achieve a clean bend. 7. You might want to leave the mud flaps off until painting. Mine broke off many times during the build. 8-10. The turret is as easy as they come, consisting of a top and a bottom that fit very well. I did have to sand the turret race a little to get the turret to fit.



boiling water method (immersing them until they were soft and carefully wrapping them around). The sprockets and idlers were also added at this time, along with the front tow points.

Before joining the upper and lower hull, the driver's compartment had to be dealt with. This is a very simple interior consisting of three side panels and some interior bits. The key here is to make sure that the three side panels, parts AE, AF and AG, all fit flush. It is also advisable to test fit the upper hull to insure that there are no gaps between the top of the panels and the upper hull. The fit on my kit was very good requiring no filler. The rest is straight forward, with steering levers, junction box and a stowage bin.

The interior needs to be painted prior to attaching the upper hull. The interior and the upper hull were first primed in black and then sprayed with Gunze Metalizer Aluminum. The Metalizer dries very fast, so the detail painting commenced right away. The side panel to the driver's right has an

insulation cover that is a beige color. This was painted with an appropriate color and the whole works was given a blackish-brown acrylic wash. A small amount of dish soap was added to the wash to increase the flow of the paint. Once the wash dried, the interior was dry brushed with a light Khaki (almost white) and the rest of the details were picked out with a brush.

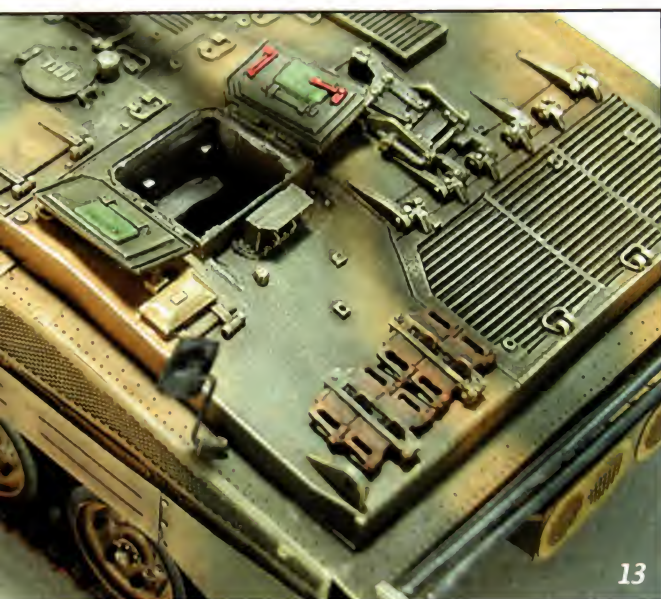
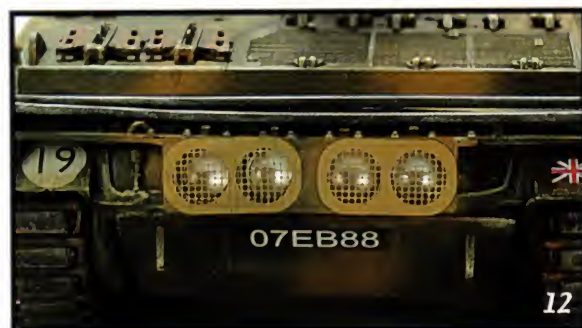
The rear hatch can be positioned in either the open or closed position. With no rear interior detail it was an easy decision to leave it closed. The door was added prior to joining the upper and lower hull. This allowed the door to be glued from the inside. Some sanding was required to get the door to fit properly. I also added the exhaust system and the jack to the left side. The end of the exhaust, part Q, can be positioned either pointing up, or down. Both are correct.

Before adding the details to the rear you must first start with the rear flotation extension rail, E3.

A locating ridge is provided for up/down location, but you have to make sure that it is centered so the rear lift points can slide into the notches in the extension. Once tacked in place, the lift point, parts Y and Z, can be attached, along with the five top support ribs, part CQ. With this out of the way, you can add the stowage bins and tools that mount under the extension. The fenders, reflectors, rear tow points and light fixtures were added, along with the photo-etched door locking clasp. This was labeled incorrectly on my instructions, but I was able to figure it out. You might want to leave the mud flaps off until painting. Mine broke off many times during the build.



11. I was looking for a different finish for this kit so I went with the BATUS (British Army Training United States) camo scheme. 12. The very delicately rendered front headlamp screens. 13. This is a peek down the hatch. There is just enough stuff in there to show off. Note the spare tracks and their bracket mounted on the hull. 14. For such a simple kit, the level of detail is pretty high. 15. Look out below! The rear view mirror arms were added last because they are so delicate. This shot gives a good view of the BATUS scheme. It consists of dark green and sand, as opposed to the green and black of the European scheme.



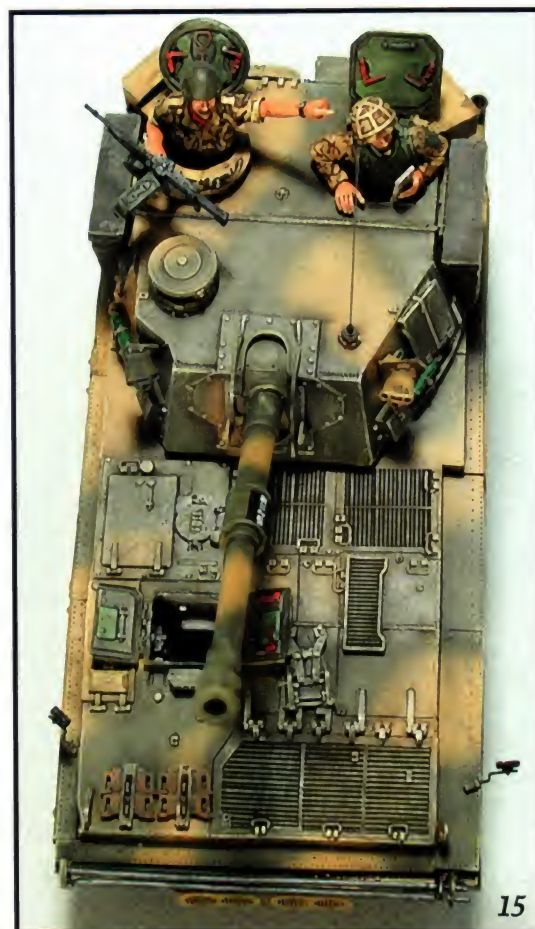
Who's on second!

The upper and lower were now joined yielding a very good fit. Some filler was needed on the front, but it was minimal. At this time the side shields and front fenders were attached, along with the gun travel lock, spare track links and the driver's hatches that were obviously positioned open. The busy front end starts with adding six flotation screen supports, part CO. There are location marks provided, so their placement is no problem. With the supports in place, you can add the front flotation screen, E2, making sure that it is centered. The Theodolite mounts, AB and AC, were added and the Theodolite legs were sanded to fit into the mountings. As I said earlier, the instructions were prototype, so the location of these bits was a little tricky. The photos should help out.

The hardest part of the kit is the bending and placement of the side flotation screens. I annealed them as usual, but this did not weaken the surface hardness enough to achieve a clean bend. I ended up scribing the bend lines repeatedly using a sharp blade and a steel straight edge, almost cutting the pieces in two. The screens could now be bent and I added plastic strip to the inside of the bend for added strength. Before attaching them to the model, I painted the sides of the tank and the insides of the screens black, thinking that the airbrush would not be able to get coverage through the screens. The screens did not affect the finish in the end, but the insides of the screens did need some color. The hull construction finishes up with the tiny latches for the screens, mirror mounts and mirrors that were left off until the final assembly.

I dunno's on third!

The turret is as easy as they come, consisting of a top and a bottom that fit very well. I did have to sand the turret race a little to get the turret to fit. The rest of the assembly is straight forward resin madness, so I



will simply highlight a couple of things. The fume extractor, part AS, has a weld seam along the left side. Don't sand this off like I did. The mounting for the shovel is lacking so you will have to add it. Using left over brass strip I bent a mounting base and used a clasp from a left over Sherman photo-etched fret.



A) These are the well-worn front screens for the headlamps. It seems they work pretty well! B) This is the muffler base with the jack located just in front of it. C) The large rear door at the back of the hull. This is used to load rounds and provides the crew with a way to get out of Dodge in a hurry. The tools mounted here are the ax head, ax handle and sledgehammer. D) The turret-mounted shovel is seen here on one of the Cadman brother's promotional Abbots. These vehicles are

Painted a vivid shade of Royal Blue and they show up at various exhibitions to help promote the Beltrung War and Peace Military Vehicle Show. E) The left rear corner of the hull showing the mounting brackets for the "Theodolite" stabilizer system. F) The opposite side of the rear hull. (All photos courtesy of Jon Bottomley)




The wing nut came with the kit. The handles at the base of the gun were bent from brass rod using the kit supplied template. That was fun!

I was looking for a different finish for this kit so when Big Jon sent me photo's of Abbots sporting the BATUS (British Army Training United States) camo scheme I knew what had to be done. The BATUS scheme consists of dark green and sand as opposed to green and black. The entire model was primed flat black and then shot with Tamiya Desert Yellow mixed with a little buff. The green bands were added using Tamiya Field Gray. The decals came with the kit and are very good. The two tanker dudes were provided by the editor. Whose are they, Pat? [Geez, Nick, I'm not sure. I think that maybe they are from the Warriors range. Let's not talk about this in front of the readers,

OK? It's kind of embarrassing..]

This was a fun kit to build with very few headaches. As I mentioned earlier, this would be a great kit for someone who is still sitting on the old

resin fence. It is reasonably priced and is well within the skill level of most geeks who read this beloved periodical. Nice Kit! 

—Nick Vanston

MMIR RECCE

Accurate Armour Abbot 105mm S.P. Kit number KT151. Kit graciously provided by the manufacturer. Suggested retail price approximately \$90.00. For more information about pricing in your neck of the woods see www.accurate-armor.com

Reference

There's not much out there. This and the photos should help.

Jane's AFV Recognition Hand Book Second Edition, by Christopher F. Foss, Jane's Information Group Limited. ISBN 0 7106 1043 2.



modeled by Bob Oehler

M26 Pershing
Kit # 35254

Kentucky Tested. Germany Proven. Desktop Worthy.



U.S. 2 1/2-Ton Cargo Truck
Kit # 35218

Jeep Willy's
Kit # 35219

M8 Greyhound
Kit # 35228



During the closing months of WWII, the Pershing Medium Tank filled the critical need for the U.S. to develop a lethal tank killer to deal with the formidable German armor of the period. Suddenly, from Fort Knox to Remagen, the bar had been raised on modern tank design. And now that same level of "bar raising" design has been achieved by Tamiya with this latest release. Thorough research on an actual vehicle to reproduce every detail in scale is obvious, including the cast texture on the hull and turret. The powerful 90 mm gun and boat-like hull has been captured in the exacting Tamiya style. You'll also find separate engine grills and crew hatches, detailed on both the interior and exterior, which can be assembled in the open or closed positions. A fully articulating, independent suspension takes on whatever terrain you decide to throw at it (or under it). Accessories include both .30 and .50 caliber ammunition boxes, machine gun tripod, two lifelike figures and K-ration boxes. So check it out at our web site www.tamiyausa.com today then pick up your M26 and these other "pieces of history" from your local retailer. If you want to see just how high the bar has been raised, the proof is in our box.


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